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Water Resources Data
Colorado
Water Year 1988

Volume 2. Colorado River Basin

Volume 2
Colorado River Basin

U.S. GEOLOGICAL SURVEY WATER-DATA REPORT CO-88-2
Prepared in cooperation with the State of Colorado
and with other agencies

CALENDAR FOR WATER YEAR 1988

1987

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March 3, 1849

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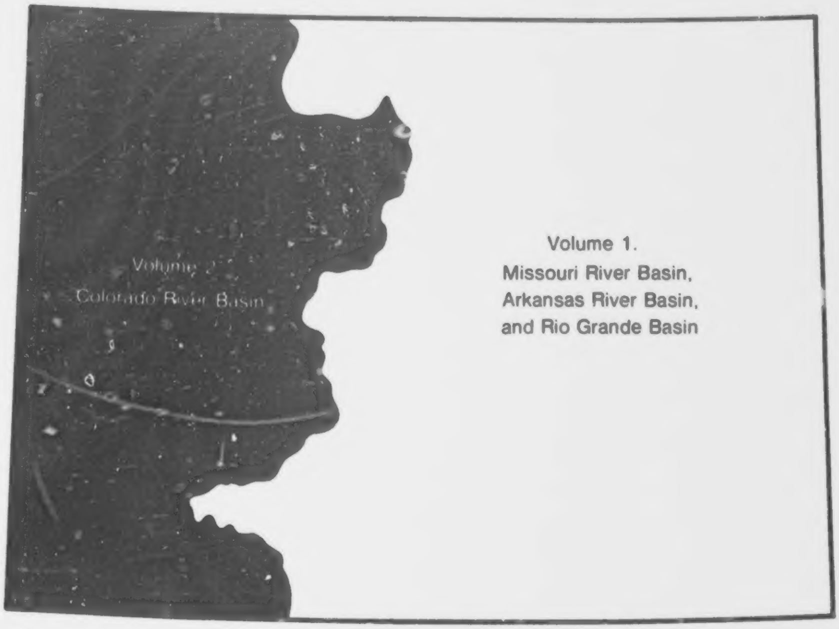
Water Resources Data Colorado
Water Year 1988

Volume 2. Colorado River Basin

by R.C. Ugland, B.J. Cochran, R.G. Kretschman, E.A. Wilson, and J.D. Bennett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and Rio Grande Basin

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Prepared in cooperation with the State of Colorado
and with other agencies

UNITED STATES DEPARTMENT OF THE INTERIOR
MANUEL LUJAN, JR., Secretary

GEOLOGICAL SURVEY
Dallas L. Peck, Director

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Denver Federal Center
Lakewood, CO 80225

1989

PREFACE

This volume of the annual hydrologic data report of Colorado is one of a series of annual reports that document hydrologic data gathered from the U. S. Geological Survey's surface- and ground-water data-collection networks in each state, Puerto Rico, and the Trust Territories. These records of streamflow, ground-water levels, and quality of water provide the hydrologic information needed by State, local, and Federal agencies, and the private sector for developing and managing our Nation's land and water resources. Hydrologic data for Colorado are contained in two volumes:

Volume 1. Missouri River, Arkansas River, and Rio Grande basins in Colorado,
Volume 2. Colorado River basin.

This report is the culmination of a concerted effort by dedicated personnel of the U. S. Geological Survey who collected, compiled, analyzed, verified, and organized the data, and who typed, edited, and assembled the report. In addition to the authors, who had primary responsibility for assuring that the information contained herein is accurate, complete, and adheres to Geological Survey policy and established guidelines, the following individuals contributed significantly to the collection, processing, and tabulation of the data:

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16. Abstract (Limit: 200 words)

Water-resources data for Colorado for the 1988 water year consist of records of stage, discharge, and water quality of streams; stage, contents, and water quality of lakes and reservoirs; and water levels and water quality of wells and springs. This report (Volumes 1 and 2) contains discharge records for 310 gaging stations, stage and contents of 25 lakes and reservoirs, 5 parital-record low-flow stations, peak flow information for 40 crest-stage partial record stations, and 1 miscellaneous site; water quality for 114 gaging stations, 170 miscellaneous sites; and for 14 observation wells. Four pertinent stations in bordering States also are included in this report. The records were collected and computed by the Water Resources Division of the U.S. Geological Survey under the direction of C.A. Pascale, District Chief. These data represent that part of the National Water Data System collected by the U.S. Geological Survey and copperating State and Federal agencies.

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Daily tables: (D) discharge, (C) specific conductance, (S) sediment,
(T) temperature, (e) elevation or contents, (O) dissolved oxygen, (P) pH.

Partial tables: (c) chemical, (b) biclogical, (m) microbiological,
(s) sediment, (t) temperature)

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WATER RESOURCES DATA - COLORADO, 1988

VOLUME 2: COLORADO RIVER BASIN

By R. C. Ugland, B. J. Cochran, R. D. Kretschman, E. A. Wilson, and J. D. Bennett

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INTRODUCTION

The Water-Resources Division of the U.S. Geological Survey, in cooperation with State agencies, obtains a large amount of data pertaining to the water resources of Colorado each water year. These data, accumulated during many water years, constitute a valuable data base for developing an improved understanding of the water resources of the State. To make these data readily available to interested parties outside the Geological Survey, the data are published annually in the report series entitled "Water Resources Data - Colorado".

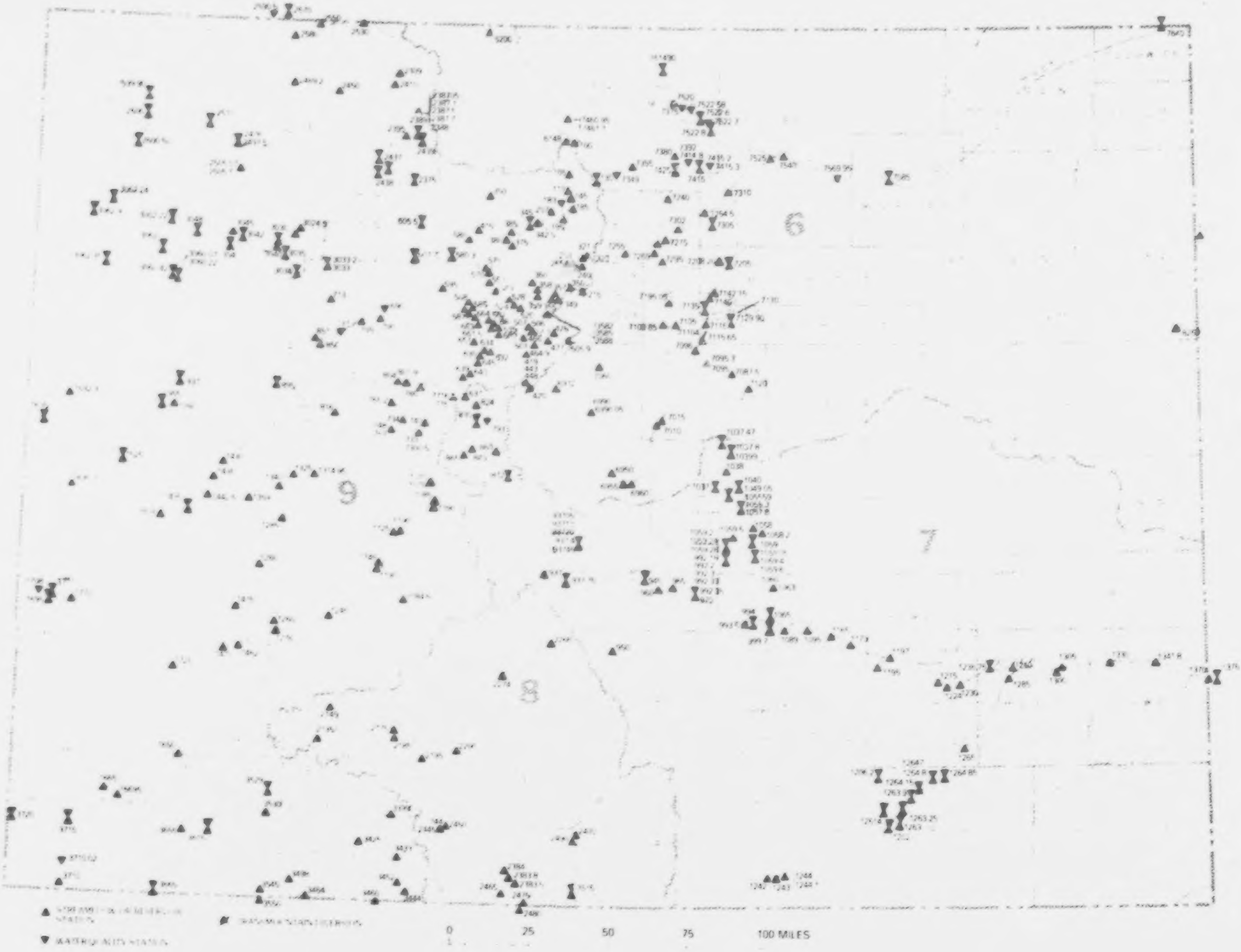
This report (Volume 2 of two volumes) includes records of surface water in the State, west of the continental divide. Specifically, it contains: (1) discharge records for [illegible] streamflow-gaging stations, for 5 partial-record streamflow stations and [illegible] miscellaneous streamflow sites; (2) stage and contents for 11 lakes and reservoirs; and (3) water-quality data for [illegible] streamflow-gaging stations, miscellaneous water-quality data for [illegible] gaged sites, meteorological data for 2 sites, and groundwater levels for 4 wells. The data in this report represent that part of the National Water Data System collected by the U.S. Geological Survey and cooperating State and Federal agencies in Colorado.

Prior to introduction of this series and for several water years concurrent with it, water-resources data for Colorado were published in U.S. Geological Survey Water-Supply Papers. Data on stream discharge and stage and on lake or reservoir contents and stage, through September 1960, were published annually under the title "Surface-Water Supply of the United States," Parts 6B, 7, and 9. For the 1961 through 1970 water years, the data were published in two 5-year reports. Data on chemical quality, temperature, and suspended sediment for the 1941 through 1970 water years were published annually under the title "Quality of Surface Waters of the United States." Data on ground-water levels for the 1935 through [illegible] water years were published annually under the title "Water Levels and Artesian Pressures in Observation Wells in the United States." For the [illegible] through 1974 water years the data were published in four 5-year reports under the title "Ground-Water Levels in the United States." Water-supply papers may be purchased from the U.S. Geological Survey, Books and Open-File Reports, Federal Center, Building 41, Box 25425, Denver, CO 80225.

For water years 1961 through 1970, streamflow data were released by the Survey in annual reports on a State-boundary basis. Water-quality records for water years 1964 through 1970 were similarly released either in separate reports or in conjunction with streamflow records.

Beginning with the 1971 water year, water data on streamflow, water quality, and ground-water are published in official Survey reports on a State-boundary basis. These official Survey reports carry an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this volume is identified as "U.S. Geological Survey Water-Data Report CO-88-2." These water-data reports are for sale, in paper copy or in micro-fiche, by the National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22161.

Additional information, including current prices, for ordering specific reports may be obtained from the District Chief at the address given on the back of the title page or by telephone (303) 236-4882.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▲ STREAMFLOW OR RESERVOIR STATION
▼ WATER-QUALITY STATION
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Figure 1.--Map showing locations of lakes and stream-gaging stations and water-quality stations in Colorado.

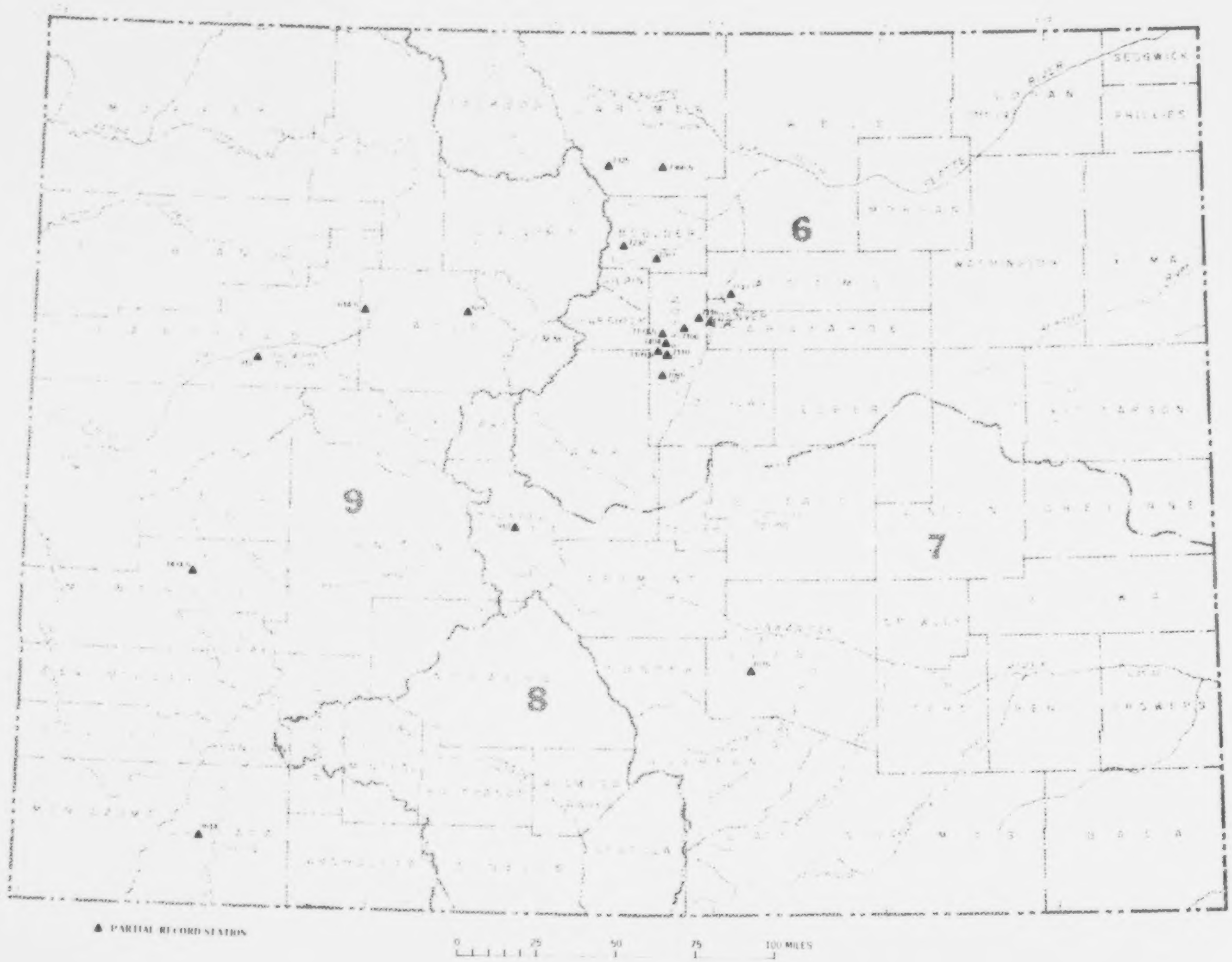
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Figure 2.--Map showing locations of crest-stage partial-record stations in Colorado.

COOPERATION

The U.S. Geological Survey and organizations of the State of Colorado have had cooperative agreements for the systematic collection of surface-water records since 1895 and for water-quality records since 1941. Organizations that assisted in collecting data for this report through cooperative agreement with the Survey are:

Arkansas River Compact Administration, Jim Rodger, Treasurer.
Bent County Commissioners, Thomas Pointon.
Boulder County Public Works Department, Tim Feehan, Systems Analyst.
Castle Pines Metro District, Sherry Ference.
Castle Pines Northern Metro District, Sherry Ference.
Chaffee County Commissioners, Jim McFarland.
Cherokee Water and Sanitation District, F. S. Loosley, Manager.
Cherry Creek Basin Authority, Rhonda Sandquist.
City and County of Denver, Board of Water Commissioners, David Little, President.
City of Arvada, Scott Daniels, City Engineer.
City of Aspen, James Markalunas, City Manager.
City of Aurora, Thomas Griswold, acting Director of Utilities.
City of Boulder, Tim Feehan, City Manager.
City of Colorado Springs, Gary Bostrom, City Manager.
City of Englewood, Stewart Fonda, Director, Wastewater Treatment Plant.
City of Fort Collins, Keith Elmund, Civil Engineer II.
City of Fruita, Bob Engelke, Mayor.
City of Glendale, Robert Taylor.
City of Glenwood Springs, Michael Copp, Manager.
City of Longmont, Linn Folsom.
City of Loveland, Richard Leffler.
City of Steamboat Springs, Harvey Rose.
City of Thornton, Nancy Vincent, City Clerk.
City of Westminster, Dan Strietelmeier.
Colorado Department of Health, Brad Beecam, Executive Director.
Colorado Department of Natural Resources, David H. Getches, Executive Director.
Colorado Division of Mined Land Reclamation, James Pendelton, Director.
Colorado Division of Water Resources, J. A. Danielson, State Engineer.
Colorado Geological Survey, John Rold, State Geologist.
Colorado River Water Conservation District, David Merritt, Secretary-Engineer.
Colorado Springs Department of Public Utilities, J. D. Phillips, Director.
Colorado Water Conservation Board, David Walker.
Delta County Board of County Commissioners, Caroline Clemens, Chairman.
Denver Regional Council of Governments, J. W. Belmear, Executive Director.
Eagle County Board of Commissioners, Dick Gustafson, Commissioner.
Evergreen Metropolitan District, G. C. Schulte, General Manager.
Fountain Valley Authority, J. D. Phillips, Secretary.
Garfield County, Mark Beam, Director of Administrative Services.
Grand County, R. Howard Moody, County Manager.
Larimer-Weld Regional Council of Governments, L. L. Pearson, Executive Director.
Lost Creek Groundwater Management District, G. H. Bush, Manager.
Lower Fountain Water-Quality Management Association, Stuart Loosely, President.
Metropolitan Denver Sewage Disposal District No. 1, William Waggy, Manager.
Mineral County, Charles Steele, Planning Officer.
Moffat County, Sheila Cowash, Director.
North Kiowa-Bijou Ground Water Management District, Donald F. McClary, Attorney.
North LaJunta Water Conservation District, Mark Korbitz.
Northern Colorado Water Conservancy District, L. Simpson, Secretary.
Pikes Peak Area Council of Governments, Maurice Rahimi.
Pikes Peak Regional Building Department, Dan Bunting.
Pitkin County Board of County Commissioners, C. Stewart, County Manager.
Pueblo Board of Water Works, Alan Hamel, Executive Director.
Pueblo Civil Defense, Betty Jo Hopper, Director.
Pueblo West Metro Water District, E. M. Zamecki, Manager.
Purgatoire River Water Conservancy District, C. Latuda, President.
Rio Blanco County Board of County Commissioners, Terry Lowell.
Rio Grande Water Conservation District, Ralph Curtis, Manager.
Southeastern Colorado Water Conservancy District, C. L. Thomson, General Manager.
Southern Ute Indian Tribe, George Knoll.
Southwestern Water Conservation District, Edward Searle, Manager.
St. Charles Mesa Water Association, Lee Simpson, Manager.
Town of Breckenridge, Gary Roberts, Town Manager.
Town of Castle Rock, Tom Gallier, Director of Utilities.
Trinchera Water Conservancy District, Charlotte Sheely, President.
Uncompahgre Valley Water Users Association, J. Hokit, Manager.
Upper Arkansas River Water Conservancy District, K. Baker, General Manager.
Upper Black Squirrel Groundwater Management District, Elvin Henderson, Chairman.
Upper Eagle Valley Water and Sanitation District, Michail Blair.
Upper Yampa Water Conservancy District, J. Fetcher.
Urban Drainage and Flood Control District, L. Scott Tucker, Executive Director.
Water Users No. 1, Jim Gayler, Associate Manager.
Yellow Jacket Water Conservancy District, F. G. Cooley, Secretary-Council.

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OVERVIEW OF HYDROLOGIC CONDITIONS
[West of the Continental Divide]

Prepared by Harold E. Petsch, Jr.

Precipitation

Precipitation data for water year 1988 were obtained from published reports of the U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Climatic Center, for the National Weather Service division in Colorado that is west of the Continental Divide. These data are listed in table 1. Precipitation and departures from normal precipitation (1951-80) are listed for the first 6 months of the water year when precipitation is predominately snow, and for the remaining 6 months when precipitation is predominately rain. Also listed are the precipitation and departure from normal precipitation for the entire water year. Precipitation for water year 1988 was near normal in the Colorado Drainage Basin Division, as shown in table 1. Graphs of monthly precipitation for the water year and for normal monthly precipitation at selected weather stations are shown in figure 3.

Table 1.--Precipitation during water year 1988 and departures from normal precipitation (1951-80), in inches

National Weather Service division	October-March		April-September		Water year 1988	
	Precipitation	Departure from normal	Precipitation	Departure from normal	Precipitation	Departure from normal
Colorado Drainage Basin	7.57	-0.04	8.20	0.45	15.77	0.41

Streamflow

Monthly mean discharges during water year 1988 at selected streamflow-gaging stations are compared to long-term mean monthly discharges in figure 4. Individual graphs show the varied streamflow west of the Continental Divide during the water year. The graphs for the gaging stations indicate that monthly discharges during the water year had the same general trend as long-term monthly discharges, but were consistently less than the long-term means during the high-discharge months of May through July. Annual mean discharges for water year 1988 were from 13 to 28 percent less than long-term average at the selected gaging stations.

The graphs for gaging stations 09070000, Eagle River below Gypsum (fig. 4, site A); 09251000, Yampa River near Maybell (fig. 4, site E); and 09304500, White River near Meeker (fig. 4, site F), indicate that monthly mean discharges for water year 1988 were greater than the long-term means only for April. The graphs for the remaining gaging stations (fig. 4, sites B-D,G) indicate that the monthly discharges for water year 1988 were greater than the long-term means for either five or six of the low-discharge months. Monthly discharges for May through July of water year 1988 were from 31 to 33 percent less than the long-term means at gaging stations 09070000, Eagle River below Gypsum (fig. 4, site A); 09114500, Gunnison River near Gunnison (fig. 4, site B); 09172500 San Miguel River near Placerville (fig. 4, site D); and 09361500, Animas River at Durango (fig. 4, site G). Monthly discharges for May through July of water year 1988 were 48 percent less than the long-term means at gaging station 09163500, Colorado River near Colorado-Utah State line (fig. 4, site C), and 16 to 21 percent less at gaging stations 09251000, Yampa River near Maybell (fig. 4, site E), and 09304500, White River near Meeker (fig. 4, site F).

Peak discharges during water year 1988 and for the period of record for selected gaging stations are listed in table 2. The peak discharge at each of the selected gaging stations was less than the long-term median value. At ten of the selected gaging stations, peak discharges were less than the 25th-percentile values, but were substantially greater than the minimum peak discharges. The peak discharge at gaging station 09152500, Gunnison River near Grand Junction, was lower than any previous peak discharge at that site.

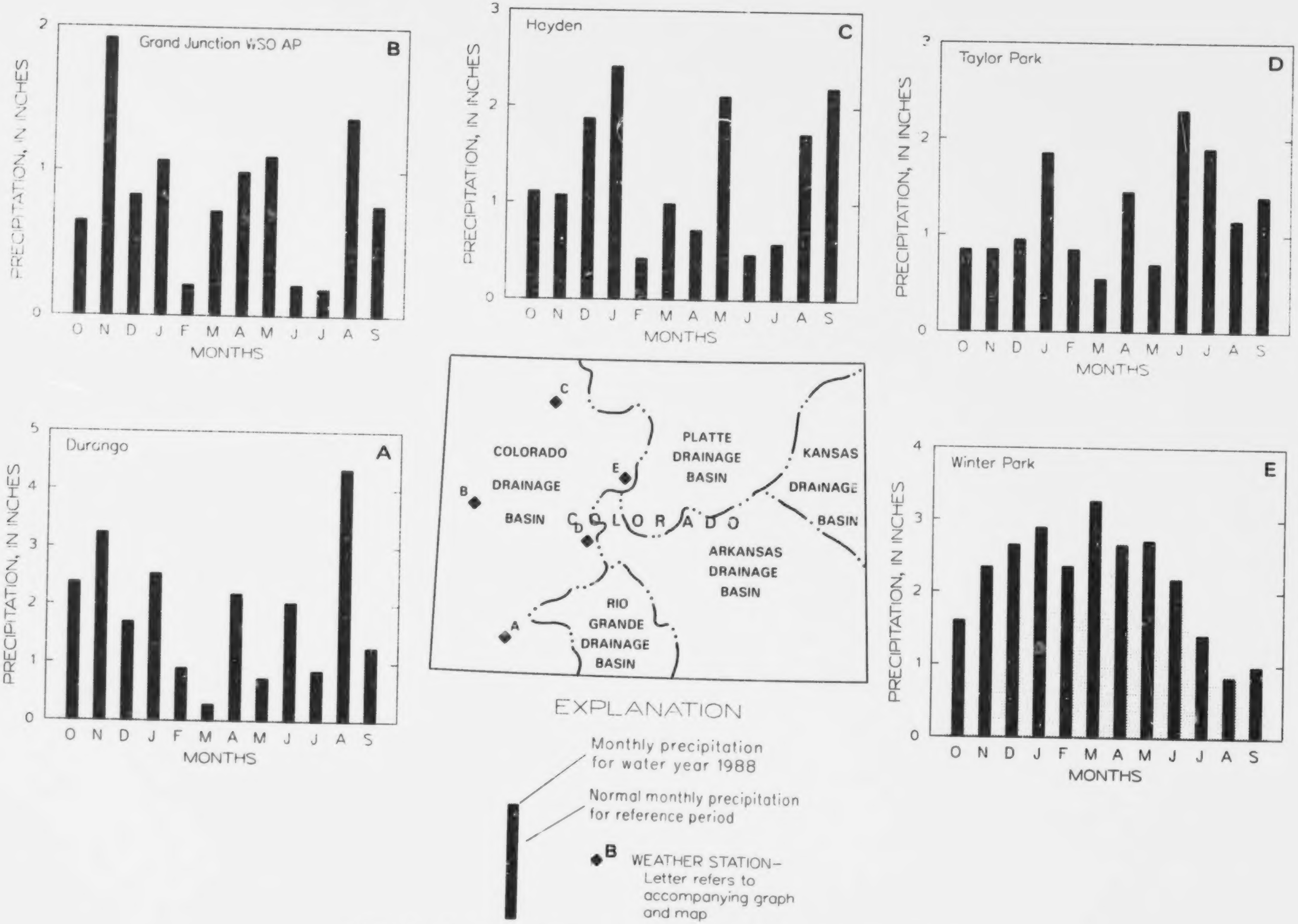


Figure 3.- Comparison of monthly precipitation for water year 1988 to normal monthly precipitation for the reference period 1951-80.

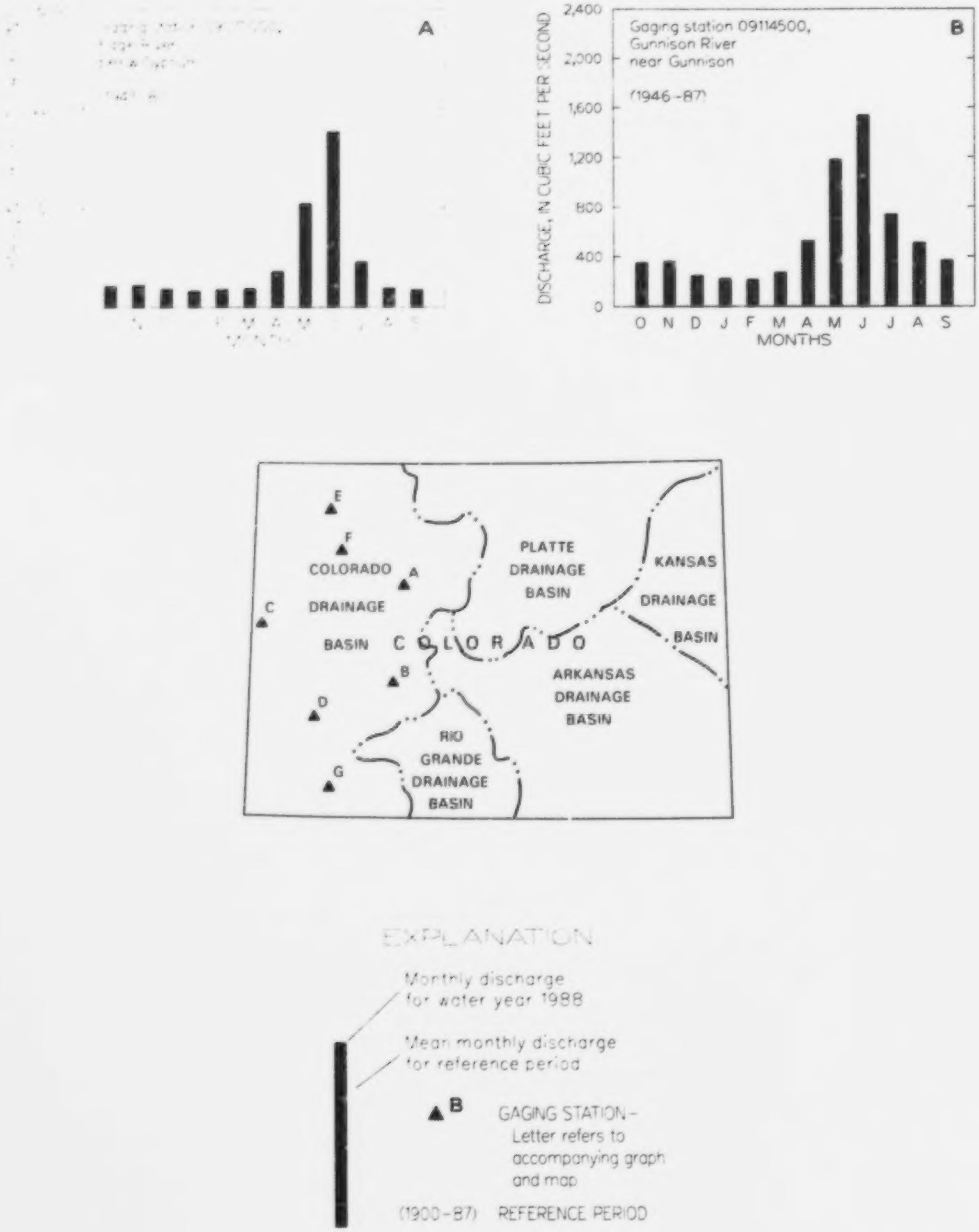


Figure 4.--Comparison of monthly discharges for water year 1988 to mean monthly discharges for the reference periods indicated on the individual graphs.

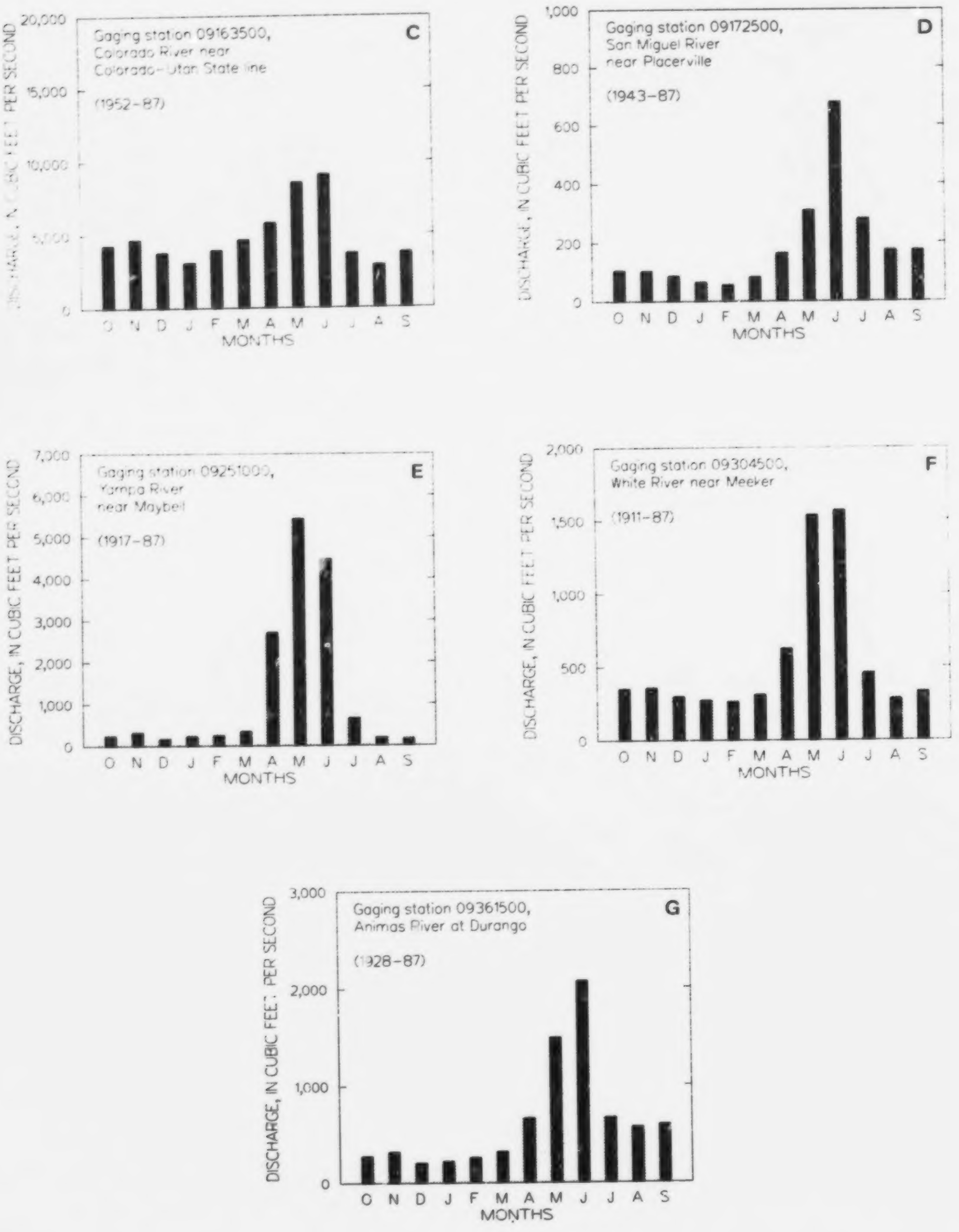


Figure 4.--(continued)

Table 2.--Peak discharges for water year 1988 and for the period of record at selected gaging stations

[mi^2, square miles; ft^3/s, cubic feet per second]

Gaging station identification		Drainage area (mi^2)	Period of record (water years)	Water year 1988		Period of record		Remarks on 1988 peak discharge
				Date	Peak discharge (ft^3/s)	Date	Peak discharge (ft^3/s)	
09034500	Colorado River at Hot Sulphur Springs	825	1905-87	5/20	1,550	6/15/21	10,300	Less than median
09070000	Eagle River below Gypsum	945	1947-87	6/7	2,920	5/25/84	7,020	Less than 25th percentile
09070500	Colorado River near Dotsero	4,394	1941-87	6/7	6,300	5/25/84	22,200	Less than 25th percentile
09085000	Roaring Fork River at Glenwood Springs	1,451	1906-9, 1911-87	6/7	4,690	7/1/57	19,000	Less than 25th percentile
09085100	Colorado River below Glenwood Springs	6,013	1967-87	6/7	11,000	5/25/84	31,500	Less than 25th percentile (4th lowest)
09095500	Colorado River near Cameo	8,050	1934-87	6/7	13,000	5/26/84	39,300	Less than 25th percentile
09114500	Gunnison River near Gunnison	1,012	1911-27, 1945-87	6/6	2,430	6/13/18	11,400	Less than 25th percentile
09132500	North Fork Gunnison River near Somerset	526	1934-87	6/6	1,690	5/24/84	9,220	Less than 25th percentile (4th lowest)
09149500	Uncompahgre River at Delta	1,129	1903-31, 1939-87	9/13	1,330	5/15/84	5,800	Less than median
09152500	Gunnison River near Grand Junction	7,928	1897-99, 1902-6, 1917-87	5/18	3,720	5/23/20	35,700	New low
09163500	Colorado River near Colorado-Utah State line	17,843	1951-87	5/13	15,400	5/27/84	69,800	Less than 25th percentile
09166500	Dolores River at Dolores	504	1896-1903, 1911-12, 1922-87	5/18	2,410	10/5/11	10,000	Less than median
09171100	Dolores River near Bedrock	2,145	1972-87	11/6	2,330	4/30/73	9,500	Less than 25th percentile (4th lowest)
09239500	Yampa River at Steamboat Springs	604	1904-6, 1910-87	6/7	3,140	6/14/21	6,820	Less than median
09251000	Yampa River near Maybell	3,410	1904-5, 1916-87	5/19	10,200	5/17/84	25,100	Less than median
09304500	White River near Meeker	755	1901-5, 1910-87	5/18	2,720	5/25/84	6,950	Less than median
09346400	San Juan River near Carracas	1,230	1962-87	5/18	2,300	6/6/70	9,730	Less than 25th percentile
09361500	Animas River at Durango	692	1912-87	6/8	3,590	10/5/11	25,000	Less than 25th percentile

Chemical Quality of Streamflow

To determine if substantial changes occurred during water year 1988 in the chemical quality of streamflow, an analysis was made of specific conductance, which was measured at gaging stations on five representative streams. The frequency of the specific-conductance measurements was either monthly, bimonthly, or weekly. Each gaging station either is the most downstream station on that stream or is representative of a substantial part of the drainage area of that stream. A comparison of the range and the distribution of the specific conductance for water year 1988 to long-term values for each selected gaging station is shown in figure 5.

Specific conductance can be used to estimate the dissolved-solids concentration in water because specific conductance is directly proportional to the concentrations of ions in water. To determine if there were significant differences between values of specific conductance for water year 1988 and values for the period of record used for comparison, a statistical technique called the Wilcoxon-Mann-Whitney rank sum test was used. This test is a non-parametric counterpart to the common t-test and does not require the data to have normal distribution.

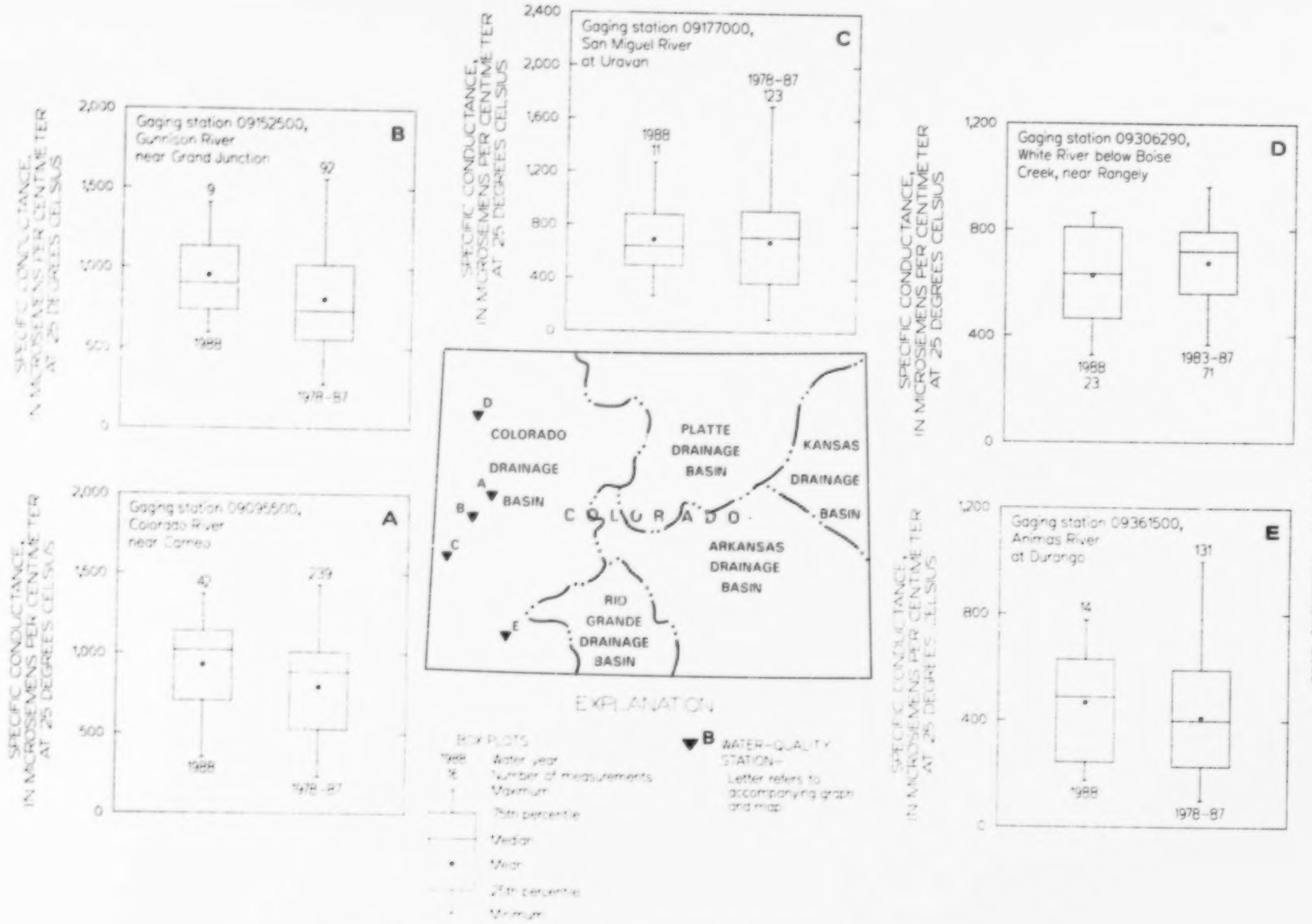


Figure 5.- Comparison of range and distribution of specific conductance measured during water year 1988 to long-term values.

The Wilcoxon-Mann-Whitney rank sum test was applied to the hypothesis that the mean specific conductance for water year 1988 was equal to the mean for the period of record. The procedure for testing the hypothesis involves computing a test statistic from the ranks of the data by using a pooled standard deviation and comparing the test statistic to a value obtained from a table of "Student's" t values (Box and others, 1978). The table value is (1 - alpha/2), where alpha (the level of significance) equals 0.05, at the appropriate degrees of freedom for the number of samples. If the absolute value of the computed test statistic (t_R) is greater than the tabular t value (t_{tab}), the hypothesis is rejected. A rejection of the hypothesis is statistical evidence that the two means are different.

Results of the Wilcoxon-Mann-Whitney rank sum tests for the five gaging stations are listed in table 3. For four of the stations, 09152500, Gunnison River near Grand Junction; 09177000, San Miguel River at Uravan; 09306290, White River below Boise Creek, near Rangely; and 09361500, Animas River at Durango, comparisons of mean specific conductance for water year 1988 to that for the period of record indicate that the means of specific conductance are not different statistically. For the gaging station 09095500, Colorado River near Cameo, the test indicated a difference in the means.

Published data for gaging station 09095500, Colorado River near Cameo, indicate an inverse relation between specific conductance and discharge. The mean specific conductance for water year 1988 at this gaging station was greater than the mean specific conductance for 1978-87, the period used for comparison (table 3). For water year 1988, mean discharge at this gaging station was less than the 1978-87 mean discharge by 36 percent; therefore, it is reasonable to expect the mean specific conductance for water year 1988 to be greater than the mean specific conductance for 1978-87.

Table 3.--Results of Wilcoxon-Mann-Whitney rank sum tests comparing mean specific conductance of discharge for water year 1988 with mean for the period of record at selected gaging stations

[Specific conductance, in microsiemens per centimeter at 25 degrees Celsius; R, rejected; A, accepted; t_R, calculated test statistic; t_{tab}, t-values from standard table]

Gaging station identification	Specific conductance						Wilcoxon-Mann-Whitney rank sum test			
	Water year 1988			Period of record						
	Number of values	Mean	Standard deviation	Number of values	Mean	Standard deviation	Period used (water year)	t_R	t_{tab}	Hypothesis
09095500 Colorado River near Cameo	42	929	274	739	793	288	1978-87	3.26	1.98	R
09152500 Gunnison River near Grand Junction	9	954	254	92	807	314	1978-87	1.59	1.99	A
09177000 San Miguel River at Uravan	11	690	282	123	675	323	1978-87	.20	1.98	A
09306290 White River below Boise Creek, near Rangely	23	627	179	71	676	162	1983-87	-1.02	1.99	A
09361500 Animas River at Durango	14	467	196	131	410	204	1978-87	1.07	1.98	A

SPECIAL NETWORKS AND PROGRAMS

Hydrologic Bench-Mark Network is a network of 57 small sites in small drainage basins around the country whose purpose is to provide consistent data on the hydrology, including water quality, and related factors in representative undeveloped watersheds nationwide, and to provide analyses on a continuing basis to compare and contrast conditions observed in basins more obviously affected by the activities of man.

National Stream Quality Accounting Network (NASQAN) is a nationwide data-collection network designed by the U.S. Geological Survey to meet many of the information needs of government agencies and other groups involved in natural or regional water-quality planning and management. The 500 or so sites in NASQAN are generally located at the downstream ends of hydrologic accounting units designated by the U.S. Geological Survey Office of Water Data Coordination in consultation with the Water Resources Council. The objectives of NASQAN are (1) to obtain information on the quality and quantity of water moving within and from the United States through a systematic and uniform process of data collection, summarization, analysis, and reporting such that the data may be used for, (2) description of the areal variability of water quality in the Nation's rivers through analysis of data from this and other programs, (3) detection of changes or trends with time in the pattern of occurrence of water-quality characteristics, and (4) providing a nationally consistent data base useful for water-quality assessment and hydrologic research.

EXPLANATION OF THE RECORDS

The surface-water records published in this report are for the 1988 water year that began on October 1, 1987, and ended September 30, 1988. A calendar of the water year is provided on the inside of the front cover. The records contain streamflow data, stage and content data for lakes and reservoirs, water-quality data for surface water. The locations of the stations where the data were collected are shown in figures 1, and 2. The following sections of the introductory text are presented to provide users with a more detailed explanation of how the hydrologic data published in this report were collected, analyzed, computed, and arranged for presentation.

Station Identification Numbers

Each data station in this report is assigned a unique identification number. This number is unique in that it applies specifically to a given station and to no other. The number usually is assigned when a station is first established and is retained for that station indefinitely. The systems used by the U.S. Geological Survey to assign identification numbers for surface-water stations and for miscellaneous sites differ, but both are based on geographic location. The "downstream order" system is used for regular surface-water stations and the "latitude-longitude" system is used for surface-water stations where only infrequent measurements are made.

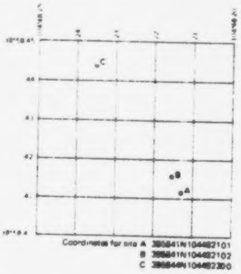
Downstream Order System

Since October 1, 1950, the order of listing hydrologic-station records in Survey reports is in a downstream direction along the main stream. All stations on a tributary entering upstream from a mainstream station are listed before that station. A station on a tributary that enters between two mainstream stations is listed between them. A similar order is followed in listing stations on first rank, second rank, and other ranks of tributaries. The rank of any tributary with respect to the stream to which it is immediately tributary is indicated by an indention in the "List of Stations" in the front of this report. Each indention represents one rank. This downstream order and system of indention show which stations are on tributaries between any two stations and the rank of the tributary on which each station is situated.

The station-identification number is assigned according to downtream order. In assigning station numbers, no distinction is made between partial-record stations and other stations; therefore, the station number for a partial-record station indicates downstream-order position in a list made up of both types of stations. Gaps are left in the series of numbers to allow for new stations that may be established; hence, the numbers are not consecutive. The complete eight-digit number for each station, such as 09010500, which appears just to the left of the station name, includes the two-digit Part number "09" plus the six-digit downstream-order number "010500." The Part number designates the major river basin; for example, Part "09" is the Colorado River basin.

Latitude-Longitude System

The identification numbers for wells, springs, and miscellaneous surface-water sites are assigned according to the grid system of latitude and longitude. The number consists of 15 digits. The first six digits denote the degrees, minutes, and seconds of latitude, the next seven digits denote the degrees, minutes, and seconds of longitude, and the last two digits (assigned sequentially) identify the sites within a 1-second grid. This site-identification number, once assigned, is a pure number, and has no locational significance. In the rare instance where the initial determination of latitude and longitude are found to be in error, the station will retain its initial identification number; however, its true latitude and longitude will be listed in the LOCATION paragraph of the station description. (See figure below.)



System for numbering wells, springs, and miscellaneous sites (township and range).

Records of Stage and Water Discharge

Records of stage and water discharge may be complete or partial. Complete records of discharge are those obtained using a continuous stage-recording device through which either instantaneous or mean daily discharges may be computed for any time, or any period of time, during the period of record. Complete records of lake or reservoir content, similarly, are those for which stage or content may be computed or estimated with reasonable accuracy for any time, or period of time. They may be obtained using a continuous stage-recording device, but need not be. Because daily mean discharges and end-of-day contents commonly are published for such stations, they are referred to as "daily stations."

By contrast, partial records are obtained through discrete measurements without using a continuous stage-recording device and pertain only to a few flow characteristics, or perhaps only one. The nature of the partial record is indicated by table titles. Records of miscellaneous discharge measurements or of measurements from special studies may be considered as partial records, but they are presented separately in this report. Locations of crest-stage partial record stations for which data are given in this report are shown in figure 2.

Data Collection and Computation

The data obtained at a complete-record gaging station on a stream or canal consist of a contiuous record of stage, individual measurements of discharge throughout a range of stages, and notations regarding factors that may affect the relationships between stage and discharge. These data, together with supplemental information, such as weather records, are used to compute daily discharges. The data obtained at a complete-record gaging station on a lake or reservoir consist of a record of stage and of notations regarding factors that may affect the relationship between stage and lake content. These data are used with stage-area and stage-capacity curves or tables to compute water-surface areas and lake storage.

Continuous records of stage are obtained with analog records that trace continuous graphs of stage or with digital recorders that punch stage values on paper tapes at selected time intervals. Measurements of discharge are made with current meters using methods adapted by the Geological Survey as a result of experience accumulated since 1880. These methods are described in standard textbooks, in Water-Supply Paper 2175, and in U.S. Geological Survey Techniques of Water-Resources Investigations, Book 3, Chapter A6.

In computing discharge records, results of individual measurements are plotted against the corresponding stages, and stage-discharge relation curves are then constructed. From these curves, rating tables indicating the approximate discharge for any stage within the range of the measurements are prepared. If it is necessary to define extremes of discharge outside the range of the current-meter measurements, the curves are extended using: (1) logarithmic plotting; (2) velocity-area studies; (3) results of indirect measurements of peak discharge, such as slope-area or contracted-opening measurements, and computations of flow over dams or weirs; or (4) step-backwater techniques.

Daily mean discharges are computed by applying the daily mean stages (gage heights) to the stage-discharge curves or tables. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the control, the daily mean discharge is determined by the shifting-control method, in which correction factors based on the individual discharge measurements and notes of the personnel making the measurements are applied to the gage heights before the discharges are determined from the curves or tables. This shifting-control method also is used if the stage-discharge relation is changed temporarily because of aquatic growth or debris on the control. For some stations, formation of ice in the winter may obscure the stage-discharge relations that daily mean discharges must be estimated from other information such as temperature and precipitation records, notes of observations, and records for other stations in the same or nearby basins for comparable periods.

At some stream-gaging stations the stage-discharge relation is affected by the backwater from reservoirs, tributary streams, or other sources. This necessitates the use of the slope method in which the slope or fall in a reach of the stream is a factor in computing discharge. The slope or fall is obtained by means of an auxiliary gage set at some distance from the base gage. At some stations the stage-discharge relation is affected by changing stage; at these stations the rate of change in stage is used as a factor in computing discharge.

In computing records of lake or reservoir contents, it is necessary to have available from surveys, curves, or tables defining the relationship of stage and content. The application of stage to the stage-content curves or tables gives the contents from which daily, monthly, or yearly changes then are determined. If the stage-content relationship changes because of deposition of sediment in a lake or reservoir, periodic resurveys may be necessary to redefine the relationship. Even when this is done, the contents computed may become increasingly in error as time since the last survey increases. Discharges over lake or reservoir spillways are computed from stage-discharge relationships much as other stream discharges are computed.

For some gaging stations there are periods when no gage-height record is obtained, or the recorded gage height is so faulty that it cannot be used to compute daily discharge or contents. This happens when the recorder stops or otherwise fails to operate properly, intakes are plugged, the float is frozen in the well, or for various other reasons. For such periods, the daily discharges are estimated from the recorded range in stage, previous or following record, discharge measurements, weather records, and comparison with other station records from the same or nearby basins. Likewise, daily contents may be estimated from operator's logs, previous or following record, inflow-outlfow studies, and other information. Information explaining how estimated daily-discharge values are identified in station records is included in the next two sections. "Data Presentation" (REMARKS paragraph) and "Identifying Estimated Daily Discharge."

Data Presentation

The records published for each gaging station consist of two parts, the manuscript or station description and the data table for the current water year. The manuscript provides, under various headings, descriptive information, such as station location; period of record; average discharge; historical extremes; record accuracy; and other remarks pertinent to station operation and regulation. The following information, as appropriate, is provided with each continuous record of discharge or lake content. Comments to follow clarify information presented under the various headings of the station description.

LOCATION.--Information on locations is obtained from the most accurate maps available. The location of the gage with respect to the cultural and physical features in the vicinity and with respect to the reference place mentioned in the station name is given. River mileages, given for only a few stations, were determined by methods given in "River Mileage Measurement," Bulletin 14, Revision of October 1968, prepared by the Water Resources Council or were provided by the U.S. Army Corps of Engineers.

DRAINAGE AREA.--Drainage areas are measured using the most accurate maps available. Because the type of maps available varies from one drainage basin to another, the accuracy of drainage areas likewise varies. Drainage areas are updated as better maps become available.

PERIOD OF RECORD.--This indicates the period for which there are published records for the station or for an equivalent station. An equivalent station is one that was in operation at a time that the present station was not, and whose location was such that records from it can reasonably be considered equivalent with records from the present station.

REVISED RECORDS.--Published records, because of new information, occasionally are found to be incorrect, and revisions are printed in later reports. Listed under this heading are all the reports in which revisions have been published for the station and the water years to which the revisions apply. If a revision did not include daily, monthly, or annual figures of discharge, that fact is noted after the year dates as follows: "(M)" means that only the instantaneous maximum discharge was revised; "(m)" that only the instantaneous minimum was revised; and "(P)" that only peak discharges were revised. If the drainage area has been revised, the report in which the most recently revised figure was first published is given.

GAGE.--The type of gage in current use, the datum of the current gage referred to National Geodetic Vertical Datum of 1929 (see glossary), and a condensed history of the types, locations, and datums of previous gages are given under this heading.

REMARKS.--All periods of estimated daily-discharge record will either be identified by date in this paragraph of the station description for water-discharge stations or flagged in the daily-discharge table. (See next section, "Identifying Estimated Daily Discharge.") If a remarks statement is used to identify estimated record, the paragraph will begin with this information presented as the first entry. The paragraph is also used to present information relative to the accuracy of the records, to special methods of computation, to conditions that affect natural flow at the station and, possibly, to other pertinent items. For reservoir stations, information is given on the dam forming the reservoir, the capacity, outlet works and spillway, and purpose and use of the reservoir.

COOPERATION.--Records provided by a cooperating organization or obtained for the Geological Survey by a cooperating organization are identified here.

AVERAGE DISCHARGE.--The discharge value given is the arithmetic mean of the water-year mean discharges. It is computed only for stations having at least 5 water years of complete record, and only water years of complete record are included in the computation. It is not computed for stations where diversions, storage, or other water-use practices cause the value to be meaningless. If water developments significantly altering flow at a station are put into use after the station has been in operation for a period of years, a new average is computed as soon as 5 water years of record have accumulated following the development.

EXTREMES FOR PERIOD OF RECORD.--Extremes may include maximum and minimum stages and maximum and minimum discharges or content. Unless otherwise qualified, the maximum discharge or content is the instantaneous maximum corresponding to the highest stage that occurred. The highest stage may have been obtained from a graphic or digital recorder, a crest-stage gage, or by direct observation of a nonrecording gage. If the maximum stage did not occur on the same day as the maximum discharge or content, it is given separately. Similarly, the minimum is the instantaneous minimum discharge, unless otherwise qualified, and was determined and is reported in the same manner as the maximum.

EXTREMES OUTSIDE PERIOD OF RECORD.--Included here is information concerning major floods or unusually low flows that occurred outside the stated period of record. The information may or may not have been obtained by the U.S. Geological Survey.

EXTREMES FOR CURRENT YEAR.--Extremes given here are similar to those for the period of record, except the peak discharge listed may include secondary peaks. For stations meeting certain criteria, all peak discharges and stages occurring during the water year and greater than a selected base discharge are presented under this heading. The peaks greater than the base discharge, excluding the highest one, are referred to as secondary peaks. Peak discharges are not published for canals, ditches, drains, or streams for which the peaks are subject to substantial control by man. The time of occurrence for peaks is expressed in 24-hour local standard time. For example, 12:30 a.m. is 0030, and 1:30 p.m. is 1330. The minimum for the current water year appears below the table of peak data.

REVISIONS.--If a critical error in published records is discovered, a revision is included in the first report published following discovery of the error.

Although rare, occasionally the records of a discontinued gaging station may need revision. Because, for these stations, there would be no current or, possibly, future station manuscript published to document the revision in a "Revised Records" entry, users of data for these stations who obtained the record from previously published data reports may wish to contact the District office to determine if the published records were ever revised after the station was discontinued. Of course, if the data were obtained by computer retrieval, the data would be current and there would be no need to check because any published revision of data is always accompanied by revision of the corresponding data in computer storage.

Manuscript information for lake or reservoir stations differs from that for stream stations in the nature of the "Remarks" and in the inclusion of a skeleton stage-capacity table when daily contents are given.

The daily table for stream-gaging stations gives mean discharge for each day and is followed by monthly and yearly summaries. In the monthly summary below the daily table, the line headed "TOTAL" gives the sum of the daily figures. The line headed "MEAN" gives the average flow in cubic feet per second during the month. The lines headed "MAX" and "MIN" give the maximum and minimum daily discharges, respectively, for the month. Discharge for the month also is usually expressed in cubic feet per second per square mile (line headed "CFSM"), or in inches (line headed "IN"), or in acre-feet (line headed "AC-FT"). Figures for cubic feet per second per square mile and runoff in inches are omitted if there is extensive regulation or diversion or if the drainage area includes large noncontributing areas. In the yearly summary below the monthly summary, the figures shown are the appropriate discharges for the calendar and water years. At some stations monthly and (or) yearly observed discharges are adjusted for reservoir storage or diversion, or diversions or reservoir contents are given. These figures are identified by a symbol and corresponding footnote.

If applicable, data collected at partial-record stations follow the information for continuous-record sites. The tables of partial-record stations are followed by a listing of discharge measurements made at sites other than continuous-record or partial-record stations. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those meausrements and others collected for some special reason are called measurements at miscellaneous sites.

Identifying Estimated Daily Discharge

Estimated daily-discharge values published in the water-discharge tables of annual State data reports are identified either by flagging individual daily values with the letter symbol "e" and printing a table footnote, "e Estimated," or by listing the dates of estimated record in the REMARKS paragraph of the station description.

Accuracy of the Records

The accuracy of streamflow records depends primarily on: (1) The stability of the stage-discharge relation or, if the control is unstable, the frequency of discharge measurements; and (2) the accuracy of measurements of stage, measurements of discharge, and interpretation of records.

The accuracy attributed to the records is indicated under "REMARKS." "Excellent" means that about 95 percent of the daily discharges are within 5 percent of their true value; "good," within 10 percent; and "fair," within 15 percent. Records that do not meet the criteria mentioned, are rated "poor." Different accuracies may be attributed to different parts of a given record.

Daily mean discharges in this report are given to the nearest hundredth of a cubic foot per second for daily values less than 1 ft^3/s; to the nearest tenth between 1.0 and 10 ft^3/s; to whole numbers between 10 and 1,000 ft^3/s; and to 3 significant figures for more than 1,000 ft^3/s. The number of significant figures used is based solely on the magnitude of the discharge value. The same rounding rules apply to discharges listed for partial-record stations and miscellaneous sites.

Discharge at many stations, as indicated by the monthly mean, may not reflect natural runoff due to the effects of diversion, consumption, regulation by storage, increase or decrease in evaporation due to artificial causes, or to other factors. Evaporation from a reservoir is not included in the adjustments for changes in reservoir contents, unless it is so stated. Even at those stations where adjustments are made, large errors in computed runoff may occur if adjustments or losses are large in comparison with the observed discharge.

Other Records Available

The National Water Data Exchange (NAWDEX), U.S. Geological Survey, Reston, VA 22092, maintains an index of records of discharge collected by other agencies but not published by the Geological Survey. Information on records at specific sites can be obtained from that office upon request.

Information used in the preparation of the records in this publication, such as discharge-measurement notes, gage-height records, temperature measurements, and rating tables are on file in the Colorado District office. Information on the availability of the unpublished information or on the results of statistical analyses of the published records may be obtained from the District office.

Records of Surface-Water Quality

Records of surface-water quality ordinarily are obtained at or near stream-gaging stations because interpretation of records of surface-water quality nearly always requires corresponding discharge data. Records of surface-water quality in this report may involve a variety of types of data and measurement frequencies.

Classification of Records

Water-quality data for surface-water sites are grouped into one of three classifications. A continuing-record station is a site where data are collected on a regularly scheduled basis. Frequency may be once or more times daily, weekly, monthly, or quarterly. A partial-record station is a site where limited water-quality data are collected systematically over a period of years. Frequency of sampling is usually less than quarterly. A miscellaneous sampling site is a location other than a continuing or partial-record station, where random samples are collected to give better areal coverage to define water-quality conditions in the river basin.

A careful distinction needs to be made between "continuing records" as used in this report and "continuous recordings," which refers to a continuous graph or a series of discrete values punched at short intervals on a paper tape. Some records of water quality, such as temperature and specific conductance, may be obtained through continuous recordings; however, because of costs, most data are obtained only monthly or less frequently. Locations of stations for which records on the quality of surface water appear in this report are shown in figure 1.

Arrangement of Records

Water-quality records collected at a surface-water daily record station are published immediately following that record, regardless of the frequency of sample collection. Station number and name are the same for both records. Where a surface-water daily record station is not available or where the water quality differs signficantly from that at the nearby surface-water station, the continuing water-quality record is published with its own number and name in the regular downstream-order sequence. Water-quality data for partial-record stations and for miscellaneous sampling sites appear in separate tables following the table of discharge measurements at miscellaneous sites.

On-site Measurements and Sample Collection

In obtaining water-quality data, a major concern needs to be assuring that the data obtained represent the in situ quality of the water. To assure this, certain measurements, such as water temperature, pH, and dissolved oxygen, need to be made onsite when the samples are taken. To assure that measurements made in the laboratory also represent the in situ water, carefully prescribed procedures need to be followed in collecting the samples, in treating the samples to prevent changes in quality pending analysis, and in shipping the samples to the laboratory. Procedures for onsite measurements and for collecting, treating, and shipping samples are given in publications on "Techniques of Water-Resources Investigations," Book 1, Chap. D2; Book 3, Chap. C2; Book 5, Chap. A1, A3, and A4. All of these references are listed on pages 30 and 31 of this report. Also, detailed information on collecting, treating, and shipping samples may be obtained from the Geological Survey District office.

One sample can define adequately the water quality at a given time if the mixture of solutes throughout the stream cross section is homogeneous. However, the concentration of solutes at different locations in the cross section may vary widely with different rates of water discharge, depending on the source of material and the turbulence and mixing of the stream. Some streams must be sampled through several vertical sections to obtain a representative sample needed for an accurate mean concentration and for use in calculating load. All samples obtained for the National Stream Quality Accounting Network (see definitions) are obtained from at least several verticals. Whether samples are obtained from the centroid of flow or from several verticals, depends on flow conditions and other factors which must be evaluated by the collector.

Chemical-quality data published in this report are considered to be the most representative values available for the stations listed. The values reported represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis. In the rare case where an apparent inconsistency exists between a reported pH value and the relative abundance of carbon dioxide species (carbonate and bicarbonate), the inconsistency is the result of a slight uptake of carbon dioxide from the air by the sample between measurement of pH in the field and determination of carbonate and bicarbonate in the laboratory.

For chemical-quality stations equipped with digital monitors, the records consist of daily maximum, minimum, and mean values for each constituent measured and are based upon hourly punches beginning at 0100 hours and ending at 2400 hours for the day of record. More detailed records (hourly values) may be obtained from the U.S.G.S. District Office whose address is given on the back of the title page of this report.

Water temperature

Water temperatures are measured at most of the water-quality stations. In addition, water temperatures are taken at time of discharge measurements for water-discharge stations. For stations where water temperatures are taken manually once or twice daily, the water temperatures are taken at about the same time each day. Large streams have a small diurnal temperature change; shallow streams may have a daily range of several degrees and may follow closely the changes in air temperature. Some streams may be affected by waste-heat discharges.

At stations where recording instruments are used, either mean temperatures or maximum and minimum temperatures for each day are published to the nearest 0.1 degree Celcius, but is usually accurate to the nearest 0.5 degrees Celsius. Water temperatures measured at the time of water-discharge measurements are published in this report as supplemental water-quality for gaging stations.

Sediment

Suspended-sediment concentrations are determined from samples collected by using depth-integrating samplers. Samples usually are obtained at several verticals in the cross section, or a single sample may be obtained at a fixed point and a coefficient applied to determine the mean concentration in the cross sections.

During periods of rapidly changing flow or rapidly changing concentration, samples may have been collected more frequently (twice daily or, in some instances, hourly). The published sediment discharges for days of rapidly changing flow or concentration were computed by the subdivided-day method (time-discharge weighted average). Therefore, for those days when the published sediment discharge value differs from the value computed as the product of discharge times mean concentration times 0.0027, the reader can assume that the sediment discharge for that day was computed by the subdivided-day method. For periods when no samples were collected, daily discharges of suspended sediment were estimated on the basis of water discharge, sediment concentrations observed immediately before and after the periods, and suspended-sediment loads for other periods of similar discharge.

At other stations, suspended-sediment samples were collected periodically at many verticals in the stream cross section. Although data collected periodically may represent conditions only at the time of observations, such data are useful in establishing seasonal relations between quality and streamflow and in predicting long-term sediment discharge characteristics of the stream.

In addition to the records of suspended-sediment discharge, records of the periodic measurements of the particle-size distribution of the suspended sediment and bed material are included for some stations.

Laboratory Measurements

Sediment samples, samples for biochemical-oxygen demand (BOD), samples for indicator bacteria, and daily samples for specific conductance are analyzed locally, all other samples are analyzed in the Geological Survey laboratories in Arvada, Colo., or Doraville, Ga. Methods used in analyzing sediment samples and computing sediment records are given in TWRI, Book 5, Chap. C1. Methods used by the Geological Survey laboratories are given in TWRI, Book 1, Chap. D2; Book 3, Chap. C2; Book 5, Chap. A1, A3, and A4.

Data Presentation

For continuing-record stations, information pertinent to the history of station operation is provided in descriptive headings preceding the tabular data. These descriptive headings give details regarding location, drainage area, period of record, type of data available, instrumentation, general remarks, cooperation, and extremes for parameters currently measured daily. Tables of chemical, physical, biological, radiochemical data, and so forth, obtained at a frequency less than daily are presented first. Tables of "daily values" of specific conductance, pH, water temperature, dissolved oxygen, and suspended sediment then follow in sequence.

In the descriptive headings, if the location is identical to that of the discharge gaging station, neither the LOCATION nor the DRAINAGE AREA statements are repeated. The following information, as appropriate, is provided with each continuous-record station. Comments that follow clarify information presented under the various headings of the station description.

LOCATION.--See Data Presentation under "Records of Stage and Water Discharge;" same comments apply.

DRAINAGE AREA.--See Data Presentation under "Records of Stage and Water Discharge;" same comments apply.

PERIOD OF RECORD.--This indicates the periods for which there are published water-quality records for the station. The periods are shown separately for records of parameters measured daily or continuously and those measured less than daily. For those measured daily or continuously, periods of record are given for the parameters individually.

INSTRUMENTATION.--Information on instrumentation is given only if a water-quality monitor temperature record, sediment pumping sampler, or other sampling device is in operaiton at a station.

REMARKS.--Remarks provide added information pertinent to the collection, analysis, or computation of the records.

COOPERATION.--Records provided by a cooperating organization or obtained for the Geological Survey by a cooperating organization are identified here.

EXTREMES.--Maximums and minimums are given only for parameters measured daily or more frequently. None are given for parameters measured weekly or less frequently, because the true maximums or minimums may not have been sampled. Extremes, when given, are provided for both the period of record and for the current water year.

REVISIONS.--If errors in published water-quality records are discovered after publication, appropriate updates are made to the Water-Quality File in the U.S. Geological Survey's computerized data system, WATSTORE, and subsequently by monthly transfer of update transactions to the U.S. Environmental Protection Agency's STORET system. Because the usual volume of updates makes it impractical to document individual changes in the State data-report series or elsewhere, potential users of U.S. Geological Survey water-quality data are encouraged to obtain all required data from the appropriate computer file to insure the most recent updates.

The surface-water-quality records for partial-record stations and miscellaneous sampling sites are published in separate tables following the table of discharge measurements at miscellaneous sites. No descriptive statements are given for these records. Each station is published with its own station number and name in the regular downstream-order sequence.

Remark Codes

The following remarks codes may appear with the water-quality data in this report:

PRINTED OUTPUT	REMARK
E	Estimated value
>	Actual value is known to be greater than the value shown
<	Actual value is known to be less than the value shown
K	Based on non-ideal colony count
M	Presence of material verified but not quantified

ACCESS TO WATSTORE DATA

The National WATer Data STOrage and REtrieval System (WATSTORE) was established for handling water data collected through the activities of the U.S. Geological Survey and to provide for more effective and efficient means of releasing the data to the public. The system is operated and maintained on the central computer facilities of the Survey at its National Center in Reston, Virginia.

WATSTORE can provide a variety of useful products ranging from simple data tables to complex statistical analyses. A minimal fee, plus the actual computer cost incurred in producing a desired product, is charged to the requester. Information about the availability of specific types of data, the acquisition of data or products, and user charges can be obtained locally from each of the Water Resources Division's District offices (see address given on the back of the title page).

General inquires about WATSTORE may be directed to:

Chief Hydrologist
U.S. Geological Survey
437 National Center
Reston, Virginia 22092

DEFINITION OF TERMS

Terms related to streamflow, water-quality, and other hydrologic data, as used in this report, are defined below. See also table for converting English units to International System (SI) Units on the inside of the back cover.

Acre-foot (AC-FT, acre-ft) is the quantity of water required to cover 1 acre to a depth of 1 foot and is equal to 43,560 cubic feet or about 326,000 gallons or 1,233 cubic meters.

Adenosine triphosphate (ATP) is an organic, phosphate-rich, compound important in the transfer of energy in organisms. Its central role in living cells makes it an excellent indicator of the presence of living material in water. A measure of ATP therefore provides a sensitive and rapid estimate of biomass. ATP is reported in micrograms per liter of the original water sample.

Algae are mostly aquatic single-celled, colonial, or multicelled plants, containing chlorophyll and lacking roots, stems, and leaves.

Algal growth potential (AGP) is the maximum algal dry weight biomass that can be produced in a natural water sample under standardized laboratory conditions. The growth potential is the algal biomass present at stationary phase and is expressed as milligrams dry weight of algae produced per liter of sample.

Aquifer is a geologic formation, group of formations, or part of a formation that contains sufficient saturated permeable material to yield significant quantities of water to wells and springs.

Artesian means confined and is used to describe a well in which the water level stands above the top of the aquifer tapped by the well. A flowing artesian well is one in which the water level is above the land surface.

Bacteria are microscopic unicellular organisms, typically spherical, rodlike, or spiral and threadlike in shape, often clumped into colonies. Some bacteria cause disease, while others perform an essential role in nature in the recycling of materials; for example, by decomposing organic matter into a form available for reuse by plants.

Total coliform bacteria are a particular group of bacteria that are used as indicators of possible sewage pollution. They are characterized as aerobic or facultative anaerobic, gram-negative, nonspore-forming, rod-shaped bacteria which ferment lactose with gas formation within 48 hours at 35°C. In the laboratory these bacteria are defined as all the organisms that produce colonies with a golden-green metallic sheen within 24 hours when incubated at 35°C ± 1.0°C on M-Endo medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Fecal coliform bacteria are bacteria that are present in the intestine or feces of warm-blooded animals. They are often used as indicators of the sanitary quality of the water. In the laboratory they are defined as all organisms that produce blue colonies within 24 hours when incubated at 44.5°C ± 0.2°C on M-FC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Fecal streptococcal bacteria are bacteria found also in the intestine of warmblooded animals. Their presence in water is considered to verify fecal pollution. They are characterized as Gram-positive, cocci bacteria which are capable of growth in brain-heart infusion broth. In the laboratory they are defined as all the organism which produce red or pink colonies with 48 hours at 35°C ± 1.0°C on KF-streptococcus medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Bed material is the sediment mixture of which a streambed, lake, pond, reservoir, or estuary bottom is composed.

Biochemical oxygen demand (BOD) is a measure of the quantity of dissolved oxygen, in milligrams per liter, necessary for the decomposition of organic matter by micro-organisms, such as bacteria.

Biomass is the amount of living matter present at any given time, expressed as the mass per unit area or volume of habitat.

Ash mass is the mass or amount of residue present after the residue from the dry mass determination has been ashed in a muffle furnace at a temperature of 500°C for 1 hour. The ash mass values of zooplankton and phytoplankton are expressed in grams per cubic meter (g/m^3), and periphyton and benthic organisms in grams per square meter (g/m^2).

Dry mass refers to the mass of residue present after drying in an oven at 105°C for zooplankton and periphyton, until the mass remains unchanged. This mass represents the total organic matter, ash and sediment, in the sample. Dry-mass values are expressed in the same units as ash mass.

Organic mass or volatile mass of the living substance is the difference between the dry mass and the ash mass and represents the actual mass of the living matter. The organic mass is expressed in the same units as for ash and dry mass.

Wet mass is the mass of living matter plus contained water.

Bottom material: See Bed material.

Cells/volume refers to the number of cells of any organism which is counted by using a microscope and grid or counting cell. Many planktonic organisms are multicelled and are counted according to the number of contained cells per sample, usually milliliters (mL) or liters (L).

Cfs-day is the volume of water represented by flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, approximately 1.9835 acre-feet, about 646,000 gallons or 2,447 cubic meters.

Chemical oxygen demand (COD) is a measure of the chemically oxidizable material in the water, and furnishes an approximation of the amount of organic and reducing material present. The determined value may correlate with natural water color or with carbonaceous organic pollution from sewage or industrial wastes.

Chlorophyll refers to the green pigments of plants. Chlorophyll a and b are the two most common green pigments in plants.

Color unit is produced by one milligram per liter of platinum in the form of the chloroplatinate ion. Color is expressed in units of the platinum-cobalt scale.

Contents is the volume of water in a reservoir or lake. Unless otherwise indicated, volume is computed on the basis of a level pool and does not include bank storage.

Control designates a feature downstream from the gage that determines the stage-discharge relation at a gage. This feature may be a natural constriction of the channel, an artificial structure, or a uniform cross section over a long reach of the channel.

Control structure as used in this report is a structure on a stream or canal that is used to regulate the flow or stage of the stream or to prevent the intrusion of salt water.

Cubic foot per second (ft^3/s) is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second and is equivalent to 7.48 gallons per second or 448.8 gallons per minute or 0.02832 cubic meters per second.

Cubic feet per second per square mile ($(ft^3/s)/mi^2$) is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming that the runoff is distributed uniformly in time and area.

Discharge is the volume of water (or more broadly, volume of fluid plus suspended sediment) that passes a given point within a given period of time.

Mean discharge (MEAN) is the arithmetic mean of individual daily mean discharges during a specific time.

Instantaneous discharge is the discharge at a particular instant of time.

Dissolved refers to that material in a representative water sample which passes through a 0.45 um membrane filter. This is a convenient operational definition used by Federal agencies that collect water data. Determinations of "dissolved" constituents are made on subsamples of the filtrate.

Dissolved-solids concentration of water is determined either analytically by the "residue-on-evaporation" method, or mathematically by totaling the concentrations of individual constituents reported in a comprehensive chemical analysis. During the analytical determination of dissolved solids, the bicarbonate (generally a major dissolved component of water) is converted to carbonate. Therefore, in the mathematical calculation of dissolved-solids concentration, the bicarbonate value, in milligrams per liter, is multiplied by 0.492 to reflect the change.

Drainage area of a stream at a specified location is that area, measured in a horizontal plane, enclosed by a topographic divide from which direct surface runoff from precipitation normally drains by gravity into the stream above the specified point. Figures of drainage area given herein include all closed basins, or noncontributing areas, within the area unless otherwise noted.

Drainage basin is a part of the surface of the earth that is occupied by a drainage system, which consists of a surface stream or body of impounded surface water together with all tributary surface streams and bodies of impounded surface water.

Gage height (G.H.) is the water-surface elevation referred to some arbitrary gage datum. Gage height is often used interchangeably with the more general term "stage" although gage height is more appropriate when used with a reading on a gage.

Gaging station is a particular site on a stream, canal, lake, or reservoir where systematic observations of hydrologic data are obtained.

Hardness of water is a physical-chemical characteristic that is commonly recognized by the increased quantity of soap required to produce lather. It is computed as the sum of equivalents of polyvalent cations and is expressed as the equivalent concentration of calcium carbonate ($CaCO_3$).

Hydrologic Bench-Mark Network is a network of 57 sites in small drainage basins around the country whose purpose is to provide consistent data on the hydrology, including water quality, and related factors in representative undeveloped watersheds nationwide, and to provide analyses on a continuing basis to compare and contrast conditions observed in basins more obviously affected by the activities of man.

Hydrologic unit is a geographic area representing part or all of a surface drainage basin or distinct hydrologic feature as delineated by the Office of Water Data Coordination on the State Hydrologic Unit Maps; each hydrologic unit is identified by an eight-digit number.

Land-surface datum (lsd) is a datum plane that is approximately at land surface at each groundwater observation well.

Measuring point (MP) is an arbitrary permanent reference point from which the distance to the water surface in a well is measured to obtain the water level.

Metamorphic stage refers to the stage of development that an organism exhibits during its transformation from an immature form to an adult form. This developmental process exists for most insects, and the degree of difference from the immature stage to the adult form varies from relatively slight to pronounced, with many intermediates. Examples of metamorphic stages of insects are egg-larva-adult or egg-nymph-adult.

Methylene blue active substances (MBAS) are apparent detergents. The determination depends on the formation of a blue color when methylene blue dye reacts with synthetic anionic detergent compounds.

Micrograms per gram (ug/g) is a unit expressing the concentration of a chemical constituent as the mass (micrograms) of the element per unit mass (gram) of material analyzed.

Micrograms per liter (UG/L, ug/L) is a unit expressing the concentration of chemical constituents in solution as mass (micrograms) of solute per unit volume (liter) of water. One thousand micrograms per liter is equivalent to one milligram per liter.

Milligrams per liter (MG/L, mg/L) is a unit for expressing the concentration of chemical constituents in solution. Milligrams per liter represents the mass of solute per unit volume (liter) of water. Concentration of suspended sediment also is expressed in mg/L and is based on the mass of dry sediment per liter of water-sediment mixture.

National Geodetic Vertical Datum of 1929 (NGVD of 1929) is a geodetic datum derived from a general adjustment of the first order level nets of both the United States and Canada. It was formerly called "Sea Level Datum of 1929" or "mean sea level" in this series of reports. Although the datum was derived from the average sea level over a period of many years at 26 tide stations along the Atlantic, Gulf of Mexico, and Pacific Coasts, it does not necessarily represent local mean sea level at any particular place.

National Stream Quality Accounting Network (NASQAN) is a nationwide data-collection network designed by the U.S. Geological Survey to meet many of the information needs of government agencies and other groups involved in natural or regional water-quality planning and management. The 500 or so sites in NASQAN are generally located at the downstream ends of hydrologic accounting units designated by the U.S. Geological Survey Office of Water Data Coordination in consultation with the Water Resources Council. The objectives of NASQAN are (1) to obtain information on the quality and quantity of water moving within and from the United States through a systematic and uniform process of data collection, summarization, analysis, and reporting such that the data may be used for, (2) description of the areal variability of water quality in the Nation's rivers through analysis of data from this and other programs, (3) detection of changes or trends with time in the pattern of occurrence of water-quality characteristics, and (4) providing a nationally consistent data base useful for water-quality assessment and hydrologic research.

National Trends Network (NTN) is a 150-station network for sampling atmospheric deposition in the United States. The purpose of the network is to determine the variability, both in location and in time, of the composition of atmospheric deposition, which incudes snow, rain, dust particles, aerosols, and gases. The core from which the NTN was built was the already-existing deposition-monitoring network of the National Atmospheric Deposition Program (NADP).

Organism is any living entity.

Organism count/area refers to the number of organisms collected and enumerated in a sample and adjusted to the number per unit area habitat, usually square meter (m^2), acre, or hectare. Periphyton, benthic organisms, and macrophytes are expressed in these terms.

Organism count/volume refers to the number of organisms collected and enumerated in a sample and adjusted to the number per sample volume, usually milliliter (mL) or liter (L). Numbers of planktonic organisms can be expressed in these terms.

Total organism count is the total number of organisms collected and enumerated in any particular sample.

Parameter Code is a 5-digit number used in the U.S. Geological Survey computerized data system, WATSTORE, to uniquely identify a specific constituent. The codes used in WATSTORE are the same as those used in the U.S. Environmental Protection Agency data system, STORET. The Environmental Protection Agency assigns and approves all requests for new codes.

Partial-record station is a particular site where limited streamflow and/or water-quality data are collected systematically over a period of years for use in hydrologic analyses.

Particle size is the diameter, in millimeters (mm), of a particle determined by either sieve or sedimentation methods. Sedimentation methods (pipet, bottom-withdrawal tube, visual-accumulation tube) determine fall diameter or particles in either distilled water (chemically dispersed) or in native water (the river water at the time and point of sampling).

Particle-size classification used in this report agrees with the recommendation made by the American Geophysical Unit Subcommittee on Sediment Terminology. The classification is as follows:

Classification	Size (mm)	Method of analysis
Clay..........	0.00024 - 0.004	Sedimentation
Silt..........	.004 - .062	Sedimentation
Sand..........	.062 - 2.0	Sedimentation or sieve
Gravel........	2.0 - 64.0	Sieve

The particle-size distributions given in this report are not necessarily representative of all particles in transport in the stream. Most of the organic matter is removed and the sample is subjected to mechanical and chemical dispersion before analysis in distilled water. Chemical dispersion is not used for native-water analysis.

Percent composition is a unit for expressing the ratio of a particular part of a sample or population to the total sample or population in terms of types, numbers, mass, or volume.

Periphyton is the assemblage of microorganisms attached to and living upon submerged solid surfaces. While primarily consisting of algae, they also include bacteria, fungi, protozoa, rotifers, and other small organisms.

Pesticides are chemical compounds used to control undesirable organisms. Major categories of pesticides include insecticides, miticides, fungicides, herbicides, and rodenticides.

Picocurie (PC, pCi) is one trillionth (1×10^{-12}) of the amount of radioactivity represented by a curie (Ci). A curie is the amount of radioactivity that yields 3.7×10^{10} radioactive disintegrations per second. A picocurie yields 2.22 dpm (disintegrations per minute).

Plankton is a community of suspended, floating, or weakly swimming organisms that live in the open water of lakes and rivers.

Phytoplankton is the plant part of the plankton. They are usually microscopic and their movement is subject to the water currents. Phytoplankton growth is dependent upon solar radiation and nutrient substances. Because they are able to incorporate as well as release materials to the surrounding water, the phytoplankton have a profound effect upon the quality of the water. They are the primary food producers in the aquatic environment, and are commonly known as algae.

Blue-green algae are a group of phytoplankton organisms having a blue pigment, in addition to the green pigment called chlorophyll. Blue-green algae often cause nuisance conditions in water.

Diatoms are the unicellular or colonial algae having a siliceous shell. Their concentrations are expressed as number of cells per milliliter (cells/mL) of sample.

Green algae have chlorophyll pigments similar in color to those of higher green plants. Some forms produce algae mats or floating "moss" in lakes. Their concentrations are expressed as number of cells per milliliter (cells/mL) of sample.

Zooplankton is the animal part of the plankton. Zooplankton are capable of extensive movements within the water column and are often large enough to be seen with the unaided eye. Zooplankton are secondary consumers feeding upon bacteria, phytoplankton, and detritus. Because they are the grazers in the aquatic environment, the zooplankton are a vital part of the aquatic food web. The zooplankton is dominated by small crustaceans and rotifers.

Primary productivity is a measure of the rate at which new organic matter is formed and accumulated through photosynthetic and chemosynthetic activity of producer organisms (chiefly, green plants). The rate of primary production is estimated by measuring the amount of oxygen released (oxygen method) or the amount of carbon assimilated by the plants (carbon method).

Milligrams of carbon per area or volume per unit time mg $C/(m^2.time)$ for periphyton and macrophytes and mg $C/(m^3.time)$ for phytoplankton are units for expressing primary productivity. They define the amount of carbon dioxide consumed as measured by radioactive carbon (carbon 14). The carbon 14 method is of greater sensitivity than the oxygen light and dark bottle method, and is preferred for use in unenriched waters. Unit time may be either the hour or day, depending on the incubation period.

Milligrams of oxygen per area or volume per unit time $mgO/(m^2.time)$ for periphyton and macrophytes and $mgO/(m^3.time)$ for phytoplankton are the units for expressing primary productivity. They define production and respiration rates as estimated from changes in the measured dissolved-oxygen concentration. The oxygen light and dark bottle method is preferred if the rate of primary production is sufficient for accurate measurements to be made within 24 hours. Unit time may be either the hour or day, depending on the incubation period.

Radiochemical program is a network of regularly sampled water-quality stations where samples are collected to be analyzed for radioisotopes. The streams that are sampled represent major drainage basins in the conterminous United States.

Recoverable from bottom material is the amount of a given constituent that is in solution after a representative sample of bottom material has been digested by a method (usually using an acid or mixture of acids) that results in dissolution of readily soluble substances. Complete dissolution of all bottom material is not achieved by the digestion treatment and thus the determination represents less than the total amount (that is, less than 95 percent) of the constituent in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Return period is the average time interval between occurrences of a hydrological event of a given or greater magnitude, usually expressed in years. May also be called recurrence interval.

Runoff in inches (IN, in) shows the depth to which the drainage area would be covered if all the runoff for a given time period were uniformly distributed on it.

Sediment is solid material that originates mostly from disintegrated rocks and is transported by, suspended in, or deposited from water; it includes chemical and biochemical precipitates and decomposed organic material such as humus. The quantity, characteristics, and cause of the occurrence of sediment in streams are influenced by environmental factors. Some major factors are degree of slope, length of slope, soil characteristics, land usage, and quantity and intensity of precipitation.

Bed load is the sediment that is transported in a stream by rolling, sliding, or skipping along the bed and very close to it. In this report, bed load is considered to consist of particles in transit within 0.25 ft of the streambed.

Bed load discharge (tons per day) is the quantity of bed load measured by dry weight that moves past a section as bed load in a given time.

Suspended sediment is the sediment that at any given time is maintained in suspension by the upward components of turbulent currents or that exists in suspension as a colloid.

Suspended-sediment concentration is the velocity-weighted concentration of suspended sediment in the sampled zone (from the water surface to a point approximately 0.3 ft above the bed) expressed as milligrams of dry sediment per liter of water-sediment mixture (mg/L).

Mean concentration is the time-weighted concentration of suspended sediment passing a stream section during a 24-hour day.

Suspended-sediment discharge (tons/day) is the rate at which dry mass of sediment passes a section of a stream or is the quantity of sediment, as measured by dry mass or volume, that passes a section in a given time. It is calculated in units of tons per day as follows: concentration (mg/L) x discharge (ft^3/s) x 0.0027.

Suspended-sediment load is a general term that refers to material in suspension. It is not synonymous with either discharge or concentration.

Total sediment discharge (tons/day) is the sum of the suspended-sediment discharge and the bed-load discharge. It is the total quantity of sediment, as measured by dry mass or volume, that passes a section during a given time.

Total-sediment load or total load is a term which refers to the total sediment (bed load plus suspended-sediment load) that is in transport. It is not synonymous with total-sediment discharge.

7-day 10-year low flow ($7 Q_{10}$) is the discharge at the 10-year recurrence interval taken from a frequency curve of annual values of the lowest mean discharge for 7 consecutive days (the 7-day low flow).

Sodium-adsorption-ratio (SAR) is the expression of relative activity of sodium ions in exchange reactions within soil and is an index of sodium or alkali hazard to the soil. Waters range in respect to sodium hazard from those which can be used for irrigation on almost all soils to those which generally unsatisfactory for irrigation.

Solute is any substance that is dissolved in water.

Specific conductance is a measure of the ability of a water to conduct an electrical current. It is expressed in microsiemens per centimeter at 25°C. Specific conductance is related to the type and concentration of ions in solution and can be used for approximating the dissolved-solids content of the water. Commonly, the concentration of dissolved solids (in milligrams per liter) is about 65 percent of the specific conductance (in microsiemens). This relation is not constant from stream to stream, and it may vary in the same source with changes in the composition of the water.

Stage-discharge relation is the relation between gage height (stage) and the volume of water, per unit of time, flowing in a channel.

Streamflow is the discharge that occurs in a natural channel. Although the term "discharge" can be applied to the flow of a canal, the word "streamflow" uniquely describes the discharge in a surface stream course. The term "streamflow" is more general than "runoff" as streamflow may be applied to discharge whether or not it is affected by diversion or regulation.

Substrate is they physical surface upon which an organism lives.

Natural substrate refers to any naturally occurring emersed or submersed solid surface, such as a rock or tree, upon which an organism lives.

Artificial substrate is a device which is purposely placed in a stream or lake for colonization of organisms. The artificial substrate simplifies the community structure by standardizing the substrate from which each sample is taken. Examples of artificial substrates are basket samplers (made of wire cages filled with clean streamside rocks) and multiplate samplers (made of hardboard) for benthic organism collection, and plexiglass strips for periphyton.

Surface area of a lake is that area outlined on the latest U.S.G.S. topographic map as the boundary of the lake and measured by a planimeter in acres. In localities not covered by topographic maps, the areas are computed from the best maps available at the time planimetered. All areas shown are those for the stage when the planimetered map was made.

Surficial bed material is the part (0.1 to 0.2 ft) of the bed material that is sampled using U.S. Series Bed-Material Samplers.

Suspended (as used in tables of chemical analyses) refers to the amount (concentration) of undissolved material in a water-sediment mixture. It is associated with the material retained on a 0.45-micrometer filter.

Suspended, recoverable is the amount of a given constituent that is in solution after the part of a representative water-suspended sediment sample that is retained on a 0.45 um membrane filter has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all the particulate matter is not achieved by the digestion treatment and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the sample. To achieve comparability of analytical data, equivalent digestion procedures are required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Determinations of "suspended, recoverable" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total recoverable concentrations of the constituents.

Suspended, total is the total amount of a given constituent in the part of a representative water-suspended sediment sample that is retained on a 0.45 um membrane filter. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to determine when the results should be reported as "suspended, total."

Determinations of "suspended, total" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total concentrations of the constituent.

Taxonomy is the division of biology concerned with the classification and naming of organisms. The classification of organisms is based upon a hierarchial scheme beginning with Kingdom and ending with Species at the base. The higher the classification level, the fewer features the organisms have in common. For example, the taxonomy of a particular mayfly, Hexagenia limbata, is the following:

Kingdom....................	Animal
Phylum.....................	Arthropoda
Class......................	Insecta
Order......................	Ephemeroptera
Family.....................	Ephemeridae
Genus......................	Hexagenia
Species....................	Hexagenia limbata

Thermograph is an instrument that continuously records variation of temperature on a chart. The more general term "temperature recorder" is used in the table headings and refers to any instrument that records temperature whether on a chart, a tape, or any other medium.

Time-weighted average is computed by multiplying the number of days in the sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the total number of days. A time-weighted average represents the composition of water that would be contained in a vessel or reservoir that had received equal quantities of water from the stream each day for the year.

Tons per acre-foot indicates the dry mass of dissolved solids in 1 acre-foot of water. It is computed by multiplying the concentration of the constituent, in milligrams per liter, by 0.00136.

Tons per day (T/DAY) is the quantity of a substance in solution or suspension that passes a stream section during a 24-hour period.

Total is the total amount of a given constituent in a representative water-suspended sediment sample, regardless of the constituent's physical or chemical form. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent present in both the dissolved and suspended phases of the sample. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total." (Note that the word "total" does double duty here, indicating both that the sample consists of a water-suspended sediment mixture and that the analytical method determined all of the constituent in the sample.)

Total discharge is the total quantity of any individual constituent, as measured by dry mass or volume, that passes through a stream cross-section per unit of time. This term needs to be qualifed, such as "total sediment discharge," "total chloride discharge," and so on.

Total, recoverable is the amount of a given constituent that is in solution after a representative water-suspended sediment sample has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all particulate matter is not achieved by the digestion treatment, and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the dissolved and suspended phases of the sample. To achieve comparability of analytical data, equivalent digestion procedures are required of all laboratories performing such analyses, because different digestion procedures are likely to produce different analytical results.

Tritium Network is a network of stations which has been established to provide baseline information on the occurrence of tritium in the Nation's surface waters. In addition to the surface-water stations in the network, tritium data are also obtained at a number of precipitation stations. The purpose of the precipitation stations is to provide an estimate sufficient for hydrologic studies of the tritium input to the United States.

Water year in Geological Survey reports dealing with surface-water supply is the 12-month period, October 1 through September 30. The water year is designated by the calendar year in which it ends and which includes 9 of the 12 months. Thus, the year ending September 30, 1980, is called the "1980 water year."

WDR is used as an abbreviation for "Water-Data Report" in the REVISED RECORDS paragraph to refer to State annual hydrologic-data reports (WRD was used as an abbreviation for "Water-Resources Data" in reports published prior to 1976).

Weighted average is used in this report to indicate discharge-weighted average. It is computed by multiplying the discharge for a sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the sum of the discharges. A discharge-weighted average approximates the composition of water that would be found in a reservoir containing all the water passing a given location during the water year after thorough mixing in the reservoir.

WSP is used as an abbreviation for "Water-Supply Paper" in references to previously published reports.

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09010500 COLORADO RIVER BELOW BAKER GULCH, NEAR GRAND LAKE, CO

LOCATION.--Lat 40°19'33", long 105°51'22", in NE¼NW¼ sec.12, T.4 N., R.76 W., Grand County, Hydrologic Unit 14010001, on left bank 500 ft downstream from Baker Gulch, 1.0 mi upstream from Bowen Gulch, and 5.5 mi northwest of town of Grand Lake.

DRAINAGE AREA.--53.4 mi^2.

PERIOD OF RECORD.--May 1953 to current year.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 8,750 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 1-8, Nov. 8-13, Nov. 15 to Apr. 21, Aug. 13-24, and Sept. 7-14. Records fair except for estimated daily discharges, which are poor. Transmountain diversion upstream from station by Grand River ditch (see elsewhere in this report). Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--35 years, 64.1 ft^3/s; 46,440 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 976 ft^3/s, June 30, 1957, gage height, 7.19 ft; maximum gage height, 7.30 ft, June 25, 1971; minimum daily discharge, 3.0 ft^3/s, Jan. 13, 1963.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 648 ft^3/s at 0200 June 7, gage height, 6.73 ft; minimum daily, 5.6 ft^3/s, Dec. 16-18.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	17	7.9	6.4	7.0	6.6	7.3	93	248	132	31	15
2	11	19	7.7	6.4	7.0	6.6	7.4	67	234	121	29	16
3	11	18	7.4	6.4	7.0	6.6	7.6	55	283	122	24	16
4	11	16	7.3	6.4	7.0	6.6	7.9	58	405	106	23	15
5	11	14	7.1	6.4	7.0	6.6	8.3	72	493	98	22	15
6	10	16	6.9	6.4	7.0	6.6	9.5	79	489	103	21	16
7	10	15	6.7	6.4	7.0	6.6	13	61	559	101	22	16
8	10	15	6.5	6.4	7.0	6.6	23	49	532	88	24	17
9	11	15	6.4	6.4	7.0	6.6	20	44	544	78	21	17
10	11	15	6.1	6.4	7.0	6.6	17	42	501	74	19	17
11	10	14	6.0	6.4	7.0	6.6	16	50	504	77	18	17
12	10	13	6.0	6.4	7.0	6.6	17	75	451	69	18	17
13	12	13	6.0	6.4	7.0	6.6	19	108	367	62	17	17
14	17	12	6.0	6.4	7.0	6.6	22	159	311	58	17	17
15	18	12	6.0	6.4	7.0	6.6	25	194	288	58	16	17
16	15	12	5.6	6.6	6.6	6.6	36	233	286	60	15	16
17	13	11	5.6	6.8	6.6	6.6	50	273	281	50	15	16
18	13	11	5.6	7.0	6.6	6.6	48	342	292	45	14	15
19	12	10	6.0	7.0	6.6	6.6	46	389	306	42	14	16
20	12	10	6.0	7.0	6.6	6.6	45	240	317	39	13	18
21	11	10	6.0	7.0	6.6	6.6	55	176	305	35	13	18
22	11	9.8	6.0	7.0	6.6	6.6	51	146	339	32	12	19
23	11	9.5	6.0	7.0	6.6	6.8	41	128	281	30	12	19
24	12	9.4	6.0	7.0	6.6	6.9	32	139	268	29	12	19
25	16	9.2	6.0	7.0	6.6	7.0	26	172	238	28	11	18
26	15	9.0	6.0	7.0	6.6	7.0	27	175	228	28	11	17
27	12	8.8	6.0	7.0	6.6	7.0	25	203	206	28	12	17
28	12	8.5	6.0	7.0	6.6	7.0	27	253	192	28	10	19
29	12	8.3	6.2	7.0	6.6	7.0	43	314	181	29	9.4	19
30	15	8.1	6.4	7.0	---	7.1	72	409	149	29	11	20
31	17	---	6.4	7.0	---	7.2	---	343	---	30	12	---
TOTAL	383	368.6	195.8	207.4	197.4	208.2	844.0	5141	10078	1909	518.4	511
MEAN	12.4	12.3	6.32	6.69	6.81	6.72	28.1	166	336	61.6	16.7	17.0
MAX	18	19	7.9	7.0	7.0	7.2	72	409	559	132	31	20
MIN	10	8.1	5.6	6.4	6.6	6.6	7.3	42	149	28	9.4	15
AC-FT	760	731	388	411	392	413	1670	10200	19990	3790	1030	1010

CAL YR 1987 TOTAL 14290.4 MEAN 39.2 MAX 340 MIN 5.6 AC-FT 28350
WTR YR 1988 TOTAL 20561.8 MEAN 56.2 MAX 559 MIN 5.6 AC-FT 40780

09013000 ALVA B. ADAMS TUNNEL AT EAST PORTAL, NEAR ESTES PARK, CO

LOCATION.--Lat 40°19'40", long 105°34'39", in SW¼NW¼ sec.9, T.4 N., R.73W., Larimer County, Hydrologic Unit 10190006, on right bank at upstream end of Aspen Creek siphon, 700 ft downstream from east portal, and 4.5 mi southwest of Estes Park.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1946 to current year (monthly discharge only for August and September 1947).

GAGE.--Water-stage recorder and Parshall flume. Elevation of gage is 8,250 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Oct. 1, 1950, water-stage recorder and Parshall flume at different datum. Oct. 1, 1950, to Sept. 30, 1952, water-stage recorder and Cippoletti weir at different datum.

REMARKS.--No estimated daily discharges. Records good. This is a transmountain diversion from Grand Lake and Shadow Mountain Lake for power and irrigation developments in the South Platte River basin as part of the Colorado-Big Thompson project. Diversion point is at west portal near town of Grand Lake, 13.35 mi west of east portal.

COOPERATION.--Records collected and computed by Colorado Division of Water Resources and reviewed by Geological Survey.

AVERAGE DISCHARGE.--42 years, 282 ft³/s, 204,300 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 592 ft³/s, June 30, 1962; no flow at times in most years.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	275	309	340	306	445	420	490	313	398	486	285
2	.00	277	310	341	307	445	33	485	303	502	486	485
3	.00	256	307	340	305	445	12	449	306	374	432	486
4	.00	254	40	342	309	446	12	455	230	378	532	485
5	.00	249	197	423	308	445	12	456	113	397	531	484
6	.00	263	286	425	308	446	11	491	304	504	524	490
7	.00	261	304	425	307	445	11	490	304	373	527	496
8	.00	261	305	424	307	446	11	492	306	353	500	498
9	.00	260	135	426	306	446	11	493	306	351	497	504
10	.00	261	195	429	304	498	11	489	306	350	489	503
11	.00	260	196	426	311	409	5.5	488	304	352	314	500
12	.00	262	196	435	307	447	.00	489	303	370	534	503
13	109	263	195	437	305	446	.00	482	305	501	535	503
14	374	262	444	440	309	450	226	445	360	393	535	470
15	272	259	333	449	309	448	402	383	355	400	535	404
16	.00	279	337	445	305	450	403	382	377	398	537	421
17	115	393	339	444	291	435	403	354	396	399	524	480
18	407	262	340	445	289	401	402	380	529	400	502	477
19	407	224	342	443	289	433	401	382	530	488	535	479
20	405	256	340	448	290	435	448	380	533	397	487	452
21	406	253	341	428	292	431	451	194	542	402	486	452
22	406	255	339	364	287	430	448	380	541	449	485	446
23	407	252	344	303	290	431	451	410	542	441	484	403
24	240	252	342	307	288	431	449	380	505	483	485	400
25	250	252	340	312	290	424	453	404	376	484	486	399
26	253	250	339	306	317	422	448	431	375	484	468	421
27	261	255	343	306	431	421	448	430	379	484	383	491
28	262	251	339	308	432	419	464	297	377	485	381	490
29	263	253	343	315	442	419	521	244	378	485	385	448
30	278	251	342	308	---	419	491	218	374	484	131	428
31	278	---	338	307	---	421	---	190	---	485	127	---
TOTAL	5393.00	7861	9200	11891	9142	13529	7858.50	12533	11172	13244	14343	13783
MEAN	174	262	297	384	315	436	262	404	372	427	463	459
MAX	407	393	444	449	442	498	521	493	542	504	537	504
MIN	.00	224	40	303	287	401	.00	190	113	350	127	285
AC-FT	10700	15590	18250	23590	18130	26830	15590	24860	22160	26270	28450	27340

CAL YR 1987 TOTAL 115086.10 MEAN 315 MAX 555 MIN .00 AC-FT 228300
WTR YR 1988 TOTAL 129949.50 MEAN 355 MAX 542 MIN .00 AC-FT 257800

09013000 ALVA B. ADAMS TUNNEL AT EAST PORTAL, NEAR ESTES PARK, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--September 1970 to current year.

REMARKS.--Field data collected prior to 1974 water year are available in district office.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO
OCT 19...	1350	413	40	7.8	11.0	7.8	17	5.1	0.95	1.5	0.2
NOV 19...	1105	86	46	8.2	7.0	8.6	19	5.6	1.2	1.8	0.2
DEC 16...	1300	506	49	7.7	5.0	8.2	21	6.4	1.2	1.8	0.2
JAN 14...	1210	551	55	8.4	4.0	8.6	22	6.7	1.2	1.9	0.2
FEB 17...	1050	427	55	7.9	4.0	7.4	22	6.7	1.3	2.2	0.2
MAR 17...	0940	525	55	7.6	5.0	7.9	24	7.3	1.3	2.1	0.2
APR 14...	1240	309	50	6.7	6.0	8.5	21	6.4	1.2	2.1	0.2
MAY 17...	1055	204	48	6.5	7.5	8.3	20	6.0	1.2	1.9	0.2
JUN 21...	0805	544	23	6.2	10.0	8.5	9	2.7	0.50	1.0	0.2
JUL 11...	1230	494	21	6.9	17.0	7.3	8	2.5	0.53	1.0	0.2
AUG 16...	0820	540	49	6.3	17.5	7.8	19	5.8	1.1	1.9	0.2
SEP 19...	1330	477	48	8.1	12.5	7.8	20	5.9	1.3	1.9	0.2

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER DAY)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)
OCT 19...	0.60	18	3.9	0.40	0.20	3.5	27	30.1	0.04	<0.10
NOV 19...	0.70	19	4.8	1.0	0.10	3.9	31	7.07	0.04	<0.10
DEC 16...	0.80	21	4.8	1.2	0.20	4.3	33	45.5	0.05	<0.10
JAN 14...	0.90	24	5.0	0.40	0.20	4.5	35	52.4	0.05	<0.10
FEB 17...	0.80	24	--	0.50	0.20	4.5	--	--	--	<0.10
MAR 17...	2.7	25	4.3	0.40	0.20	4.8	38	54.0	0.05	<0.10
APR 14...	0.80	22	5.4	0.40	0.20	5.2	35	29.5	0.05	<0.10
MAY 17...	0.70	21	5.1	0.50	0.20	4.7	33	18.2	0.05	<0.10
JUN 21...	0.30	9.0	5.0	0.40	0.50	3.7	20	28.7	0.03	<0.10
JUL 11...	0.30	9.0	3.0	0.30	0.10	3.3	16	22.0	0.02	<0.10
AUG 16...	0.60	21	4.0	0.30	0.10	3.8	30	44.1	0.04	<0.10
SEP 19...	0.60	21	3.9	0.40	0.10	3.6	30	39.1	0.04	<0.10

09013000 ALVA B. ADAMS TUNNEL AT EAST PORTAL, NEAR ESTES PARK, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOSPHOROUS TOTAL (MG/L AS P)	PHOSPHOROUS DISSOLVED (MG/L AS P)	CADMIUM DISSOLVED (UG/L AS CD)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, DISSOLVED (UG/L AS MN)	NICKEL, DISSOLVED (UG/L AS NI)	ZINC, DISSOLVED (UG/L AS ZN)
OCT											
19...	<0.10	0.4	0.02	<0.01	<1	2	13	<5	<1	2	<3
NOV											
19...	<0.10	0.4	0.02	0.03	--	--	27	--	2	--	--
DEC											
16...	<0.10	0.6	0.02	0.02	--	--	18	--	1	--	--
JAN											
14...	<0.10	<0.2	0.01	<0.01	<1	3	21	<5	2	<1	4
FEB											
17...	<0.10	0.2	<0.01	0.01	--	--	20	--	3	--	--
MAR											
17...	<0.10	<0.2	0.02	0.02	--	--	30	--	7	--	--
APR											
14...	0.10	0.2	0.01	<0.01	<1	1	68	<5	6	<1	4
MAY											
17...	<0.10	0.3	0.02	<0.01	--	--	67	--	3	--	--
JUN											
21...	<0.10	0.3	<0.01	<0.01	--	--	40	--	2	--	--
JUL											
11...	<0.10	<0.2	<0.01	<0.01	<1	3	40	<5	<1	<1	9
AUG											
16...	--	0.6	0.02	0.02	--	--	77	--	2	--	--
SEP											
19...	<0.10	<0.2	0.02	0.01	--	--	35	--	1	--	--

09014500 SHADOW MOUNTAIN LAKE NEAR GRAND LAKE, CO

LOCATION.--Lat 40°12'26", long 105°50'27", in SW¼NW¼ sec.19, T.3 N., R.75 W., Grand County, Hydrologic Unit 14010001, in gate house on left side of outlet gates near center of Shadow Mountain Dam on Colorado River, 1.0 mi upstream from Pole Creek and 3.2 mi south of town of Grand Lake.

DRAINAGE AREA.--185 mi².

PERIOD OF RECORD.--April 1947 to current year. Prior to October 1960, published as Shadow Mountain Reservoir near Grand Lake.

REVISED RECORDS.--WSP 1149: 1947-48. WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation); gage readings have been reduced to elevations above National Geodetic Vertical Datum of 1929. Supplementary water-stage recorder on Grand Lake, 800 ft north of outlet gates and 2.9 mi north of Shadow Mountain Dam.

REMARKS.--Lake is formed by earth and rockfill dam and dikes. Storage began in April 1947. Capacity, 17,860 acre-ft, including usable capacity of Grand Lake above elevation 8,365 ft, between elevation 8,347 ft, sill of outlet gate, and 8,367 ft, maximum water surface. Dead storage in Shadow Mountain Lake, 506 acre-ft. Dead storage in Grand Lake not determined. Shadow Mountain Lake is used for stabilization of water level in Grand Lake. Usable capacity for diversion through Alva B. Adams tunnel, 3,660 acre-ft between elevations 8,365 ft, crest of tunnel inlet and 8,367 ft, maximum water surface. Figures given represent usable contents as determined from summation of individual contents of Grand Lake and Shadow Mountain Lake. Transmountain diversion from Colorado River basin, including water pumped from Lake Granby, is effected through Grand Lake and Alva B. Adams tunnel, for power and irrigation in South Platte River basin.

COOPERATION.--Records provided by U.S. Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 17,920 acre-ft, May 22, 1955, elevation, 8,367.03 ft; minimum since appreciable storage was first attained, 2,630 acre-ft, May 14, 1948.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 17,590 acre-ft, Aug. 17, elevation, 8,366.90 ft; minimum, 16,590 acre-ft, June 5, elevation, 8,366.21 ft.

MONTHEND ELEVATION IN FEET NGVD AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

Date	Elevation	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	8,366.66	17,260	-
Oct. 31	8,366.62	17,160	-100
Nov. 30	8,366.65	17,210	+50
Dec. 31	8,366.65	17,210	0
CAL YR 1987			-80
Jan. 31	8,366.56	17,040	-170
Feb. 29	8,366.68	17,240	+200
Mar. 31	8,366.69	17,250	+10
Apr. 30	8,366.71	17,300	+50
May 31	8,366.53	17,000	-300
June 30	8,366.64	17,190	+190
July 31	8,366.81	17,460	+270
Aug. 31	8,366.74	17,370	-90
Sept. 30	8,366.77	17,400	+30
WTR YR 1988			+140

09018300 GRANBY PUMP CANAL NEAR GRAND LAKE, CO

LOCATION.--Lat 40°12'25", long 105°50'56", in SW¼NE¼ sec.24, T.3 N., R.76 W., Grand County, Hydrologic Unit 14010001, at road crossing at south end of Shadow Mountain Lake, 4 mi southwest of Grand Lake, and 13.5 mi northeast of Granby.

PERIOD OF RECORD.--September 1970 to September 1975, March 1978 to current year.

REMARKS.--No flow at time of visit for May, June, and July of 1988 water year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)
NOV								
20...	0630	717	61	--	6.5	6.6	K9	K<1
JAN								
07...	0700	701	54	6.6	3.0	--	K<1	K<1
27...	0700	694	54	6.8	3.0	7.7	--	--
FEB								
24...	0700	363	50	6.5	2.0	--	K<1	K<1
MAR								
31...	0630	709	56	7.6	2.0	7.0	K<1	K<1
APR								
27...	0630	710	60	6.8	3.5	7.4	K17	K<1
AUG								
04...	1725	250	--	7.3	8.0	5.4	--	--
SEP								
01...	0700	200	55	--	7.0	4.4	K4	K<1
22...	0705	250	52	--	6.0	3.2	K6	K<1

DATE	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHOROUS TOTAL (MG/L AS P)	CADMIUM DIS-SOLVED (UG/L AS CD)	COPPER, DIS-SOLVED (UG/L AS CU)	LEAD, DIS-SOLVED (UG/L AS PB)	NICKEL, DIS-SOLVED (UG/L AS NI)	ZINC, DIS-SOLVED (UG/L AS ZN)
NOV								
20...	<0.10	0.3	0.02	<1	<1	<5	<1	10
JAN								
07...	--	0.3	0.01	--	--	--	--	--
27...	--	0.4	0.01	<1	1	<5	3	<10
FEB								
24...	<0.10	<0.2	0.01	--	--	--	--	--
MAR								
31...	<0.10	0.3	<0.01	<1	2	<5	3	<10
APR								
27...	<0.10	<0.2	0.02	--	--	--	--	--
AUG								
04...	<0.10	<0.2	0.03	<1	6	<5	<1	10
SEP								
01...	<0.10	0.2	0.03	<1	11	<5	<1	20
22...	<0.10	0.2	0.04	<1	4	<5	4	<10

K BASED ON NON-IDEAL COLONY COUNT.

09018500 LAKE GRANBY NEAR GRANBY, CO

LOCATION.--Lat 40°10'55", long 105°52'14", in NW¼NE¼ sec.35, T.3 N., R.76 W., Grand County, Hydrologic Unit 14010001, in Granby pumping plant at north shore of lake, 2.5 mi north of Granby Dam on Colorado River and 7.5 mi northeast of Granby.

DRAINAGE AREA.--312 mi^2.

RESERVOIR ELEVATIONS AND CONTENTS RECORDS

PERIOD OF RECORD.--October 1949 to current year. Prior to October 1955, published as Granby Reservoir near Granby.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation); gage readings have been reduced to elevations above National Geodetic Vertical Datum of 1929. Prior to Apr. 9, 1951, nonrecording gage at dam at present datum.

REMARKS.--Lake is formed by earthfill dam and dikes. Regulation began Sept. 13, 1949, and usable storage began June 14, 1950, while dam was under construction. Usable capacity, 465,600 acre-ft, between elevations 8,186.00 ft, trash rack sill at outlet, and 8,280.00 ft, top of radial spillway gates. Dead storage, 74,190 acre-ft. Figures given represent usable contents. Lake is used to store water for pumping to Shadow Mountain Lake for transmountain diversion through Alva B. Adams tunnel for, power and irrigation in South Platte River basin.

COOPERATION.--Records provided by U.S. Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 465,900 acre-ft, July 13, 1962, elevation, 8,280.05 ft; minimum since appreciable storage was attained, 13,070 acre-ft, Apr. 16, 1978, elevation, 8,190.93 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 418,300 acre-ft, July 5, elevation, 8,273.35 ft; minimum, 261,400 acre-ft, Apr. 2, elevation, 8,248.70 ft.

MONTHEND ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.	8,265.28	363,500	-
Oct. 31.	8,263.42	354,600	-8,900
Nov. 30.	8,261.83	341,100	-13,500
Dec. 31.	8,259.23	324,700	-16,400
CAL YR 1987	-	-	-79,100
Jan. 31.	8,255.80	303,500	-21,200
Feb. 29.	8,253.01	286,700	-16,800
Mar. 31.	8,248.85	262,300	-24,400
Apr. 30.	8,249.24	264,500	+2,200
May 31.	8,257.37	313,100	+48,600
June 30.	8,273.10	416,500	+103,400
July 31.	8,271.44	405,000	-11,500
Aug. 31.	8,267.61	378,900	-26,100
Sept. 30.	8,263.39	351,200	-27,700
WTR YR 1988	-	-	-12,300

09018500 LAKE GRANBY NEAR GRANBY, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1973 to June 1975, June 1979, June 1980, July 1981, June 1982, July 1983, June 1984, July 1985, July 1986, July 1987, and July 1988.

REMARKS.--A complete taxonomic identification with cell counts for phytoplankton available in district office.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	SAMPLING DEPTH (FEET)	PH (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)
JUL					
13...	1015	0.1	8.3	19.0	7.7
13...	1016	5.0	8.4	18.0	7.8
13...	1017	10.0	8.4	17.5	7.7
13...	1018	20.0	8.0	16.5	7.1
13...	1019	25.0	7.7	14.0	6.2
13...	1020	30.0	7.5	12.0	5.9
13...	1021	40.0	7.4	10.0	5.8
13...	1022	50.0	7.2	7.5	5.8
13...	1023	60.0	7.2	6.5	5.2
13...	1024	70.0	7.1	6.5	5.1
13...	1025	75.0	7.1	6.0	5.0
13...	1026	80.0	7.1	6.0	5.1
13...	1027	90.0	7.1	5.5	5.1
13...	1028	100	7.1	5.5	5.1
13...	1029	110	7.0	5.5	5.1
13...	1030	120	7.0	5.5	5.0
13...	1031	125	7.0	5.5	5.0
13...	1032	130	7.0	5.5	5.0
13...	1033	140	7.0	5.0	5.0
13...	1034	150	7.0	5.0	5.0
13...	1035	160	7.0	5.0	5.0
13...	1036	170	7.0	5.0	5.0

DATE	TIME	SAMPLING DEPTH (FEET)	SPECIFIC CONDUCTANCE (US/CM)	PH (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	TRANSPARENCY (SECCHI DISK) (IN)	OXYGEN, DISSOLVED (MG/L)	COLIFORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)
JUL									
13...	1050	0.1	60	8.3	19.0	88.0	7.7	K3	K<1
13...	1105	170	59	7.0	5.0	--	5.0	--	--

DATE	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOSPHOROUS TOTAL (MG/L AS P)	CADMIUM DISSOLVED (UG/L AS CD)	COPPER, DISSOLVED (UG/L AS CU)	LEAD, DISSOLVED (UG/L AS PB)	NICKEL, DISSOLVED (UG/L AS NI)	ZINC, DISSOLVED (UG/L AS ZN)
JUL								
13...	<0.10	<0.2	0.01	<1	2	<5	1	<10
13...	<0.10	<0.2	0.01	<1	2	<5	1	<10

K BASED ON NON-IDEAL COLONY COUNT.

09019500 COLORADO RIVER NEAR GRANBY, CO

LOCATION.--Lat 40°07'15", long 105°54'00", in SW¼NW¼ sec.22, T.2 N., R.76 W., Grand County, Hydrologic Unit 14010001, on right bank 0.3 mi upstream from bridge on U.S. Highway 34, 1.3 mi upstream from Willow Creek, and 3.2 mi northeast of Granby.

DRAINAGE AREA.--323 mi².

PERIOD OF RECORD.--October 1907 to September 1911 (published as Grand River near Granby), October 1933 to September 1953. May 1961 to current year (irrigation season only). Monthly discharge only for some periods,published in WSP 1313.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 7,960 ft above National Geodetic Vertical Datum of 1929, from topographic map. June 10, 1908, to Sept. 30, 1911, and May 12 to June 10, 1934, nonrecording gage, at site 300 ft upstream at different datums. June 11, 1934, to Sept. 30, 1953, water-stage recorder at present site and datum.

REMARKS.--No estimated daily discharges: Records good. Flow regulated by Lake Granby (station 09018500) since Sept. 13, 1949. Several diversions for irrigation of hay meadows upstream from station. Transmountain diversions upstream from station by Eureka and Grand River ditches and Alva B. Adams tunnel (see elsewhere in this report). Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF SEASONAL RECORD.--Maximum discharge, 2,510 ft³/s, July 11, 1983, gage height, 5.39 ft; minimum daily, 9.6 ft³/s, Sept. 21, 1981.

EXTREMES FOR PERIOD OF CONTINUOUS RECORD.--Maximum discharge observed, 4,100 ft³/s, June 20, 1909, gage height, 5.5 ft, site and datum then in use; minimum daily, 6.6 ft³/s, Jan. 29, 1950; minimum observed prior to starting construction of Shadow Mountain Lake, 20 ft³/s, Apr. 6, 1936 (discharge measurement).

EXTREMES FOR CURRENT SEASON.--Maximum discharge, 116 ft³/s at 2300 June 21, gage height, 1.33 ft; minimum daily, 18 ft³/s, Sept. 10.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	41	73	73	54	32
2	---	---	---	---	---	---	---	57	72	72	38	23
3	---	---	---	---	---	---	---	73	73	70	40	22
4	---	---	---	---	---	---	---	75	75	69	41	21
5	---	---	---	---	---	---	---	78	77	72	39	21
6	---	---	---	---	---	---	---	78	75	75	38	21
7	---	---	---	---	---	---	---	76	73	75	37	21
8	---	---	---	---	---	---	---	76	75	73	38	21
9	---	---	---	---	---	---	---	76	76	73	38	20
10	---	---	---	---	---	---	---	78	76	73	37	18
11	---	---	---	---	---	---	---	78	81	73	38	23
12	---	---	---	---	---	---	---	76	81	73	38	22
13	---	---	---	---	---	---	---	76	76	73	37	21
14	---	---	---	---	---	---	---	76	70	73	37	21
15	---	---	---	---	---	---	---	75	73	72	36	21
16	---	---	---	---	---	---	---	83	80	70	36	21
17	---	---	---	---	---	---	---	81	78	67	38	21
18	---	---	---	---	---	---	---	78	80	67	41	21
19	---	---	---	---	---	---	---	86	78	70	42	21
20	---	---	---	---	---	---	---	72	72	70	41	21
21	---	---	---	---	---	---	---	76	78	71	42	21
22	---	---	---	---	---	---	---	81	81	73	41	21
23	---	---	---	---	---	---	---	80	78	81	40	21
24	---	---	---	---	---	---	---	75	76	81	40	20
25	---	---	---	---	---	---	---	78	75	76	40	21
26	---	---	---	---	---	---	---	80	73	72	41	21
27	---	---	---	---	---	---	---	78	72	75	41	21
28	---	---	---	---	---	---	35	73	73	75	40	21
29	---	---	---	---	---	---	49	73	75	72	41	21
30	---	---	---	---	---	---	45	73	76	73	41	21
31	---	---	---	---	---	---	---	75	---	75	41	---
TOTAL	---	---	---	---	---	---	---	2331	2271	2257	1232	642
MEAN	---	---	---	---	---	---	---	75.2	75.7	72.8	39.7	21.4
MAX	---	---	---	---	---	---	---	86	81	81	54	32
MIN	---	---	---	---	---	---	---	41	70	67	36	18
AC-FT	---	---	---	---	---	---	---	4620	4500	4480	2440	1270

09020700 WILLOW CREEK RESERVOIR NEAR GRANBY, CO

LOCATION.--Lat 40°08'49", long 105°56'31", in SE¼ sec.7, T.2 N., R.76 W., Grand County, Hydrologic Unit 14010001, in shaft house near right end of Willow Creek Dam, 3.2 mi upstream from mouth, and 4.2 mi north of Granby.

DRAINAGE AREA.--134 mi².

PERIOD OF RECORD.--May 1953 to current year.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation); gage readings have been reduced to elevations above National Geodetic Vertical Datum of 1929.

REMARKS.--Reservoir is formed by earth and rockfill dam; storage began March 1953. Dead storage pool filled May 3, 1953. Usable capacity, 9,060 acre-ft between elevations 8,077.00 ft, trash rack sill at outlet, and 8,130.00 ft, crest of spillway. Dead storage, 1,490 acre-ft. Figures given represent usable contents. Water is pumped to Lake Granby for transmountain diversion for irrigation and power in South Platte River basin. Records are provided by U.S. Bureau of Reclamation.

COOPERATION.--Records provided by U.S. Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 9,100 acre-ft, May 24, 1984, elevation, 8,130.12 ft; minimum 50 acre-ft, Dec. 4, 1985 to Jan. 17, 1986, drawdown for maintenance, elevation, 8,077.50 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 8,530 acre-ft, May 21, elevation, 8,128.17 ft; minimum, 5,690 acre-ft, Oct. 28, elevation, 8,116.75 ft.

MONTHEND ELEVATION IN FEET NGVD AND CONTENTS, AT 0800, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

Date	Elevation	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	8,120.55	6,540	-
Oct. 31	8,117.08	5,760	-780
Nov. 30	8,119.02	6,180	+420
Dec. 31	8,119.85	6,370	+190
CAL YR 1987			-320
Jan. 31	8,121.06	6,650	+280
Feb. 29	8,122.39	6,980	+330
Mar. 31	8,124.33	7,470	+490
Apr. 30	8,120.58	6,540	-930
May 31	8,126.26	7,990	+1,450
June 30	8,123.34	7,220	-770
July 31	8,121.65	6,800	-420
Aug. 31	8,124.99	7,640	+840
Sept. 30	8,126.65	8,100	+460
WTR YR 1988			+1,560

09022000 FRASER RIVER AT UPPER STATION, NEAR WINTER PARK, CO

LOCATION.--Lat 39°50'45", long 105°45'05", in Sec.26, T.2 S., R.75 W., Grand County, Hydrologic Unit 14010001, on left bank 0.8 mi upstream from Parsenn Creek and 2.5 mi south of Winter Park.

DRAINAGE AREA.--10.5 mi^2.

PERIOD OF RECORD.--May to September 1908, July to November 1909 (published as "at upper station near Fraser"), October 1968 to September 1973, Aug. 21, 1984 to current year. January to September 1911, gage heights only (published as "near Fraser"). Records for August to December 1910, published in WSP 289 as "near Fraser" are unreliable and should not be used.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 9,520 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Oct. 1, 1968, nonrecording gage at site 0.9 mi upstream at different datum. Since Oct. 1, 1968, supplementary water-stage recorder and Parshall flume on Berthoud Pass ditch.

REMARKS.--Estimated daily discharges. Oct. 20-23, 27, 28, Nov. 9, 10, 12, 13, 19-22, and Apr. 13-18. Records good. Transmountain diversions upstream from station through Berthoud Pass ditch to Moffat water tunnel, (see elsewhere in this report). Several observations of specific conductance and water temperature were obtained, and are published elsewhere in this report.

AVERAGE DISCHARGE.--9 years, 14.6 ft^3/s; 10,580 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 181 ft^3/s, June 5, 1972, gage height, 2.15 ft; minimum daily, 1.3 ft^3/s, Feb. 20, 1971.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 130 ft^3/s at 1600 June 4, gage height 1.91 ft; minimum daily, 1.5 ft^3/s, Mar. 18, 19.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.5	4.7	2.4	2.7	2.2	2.0	1.8	8.0	49	55	18	8.2
2	4.5	4.7	2.4	2.7	2.2	2.1	1.9	7.3	50	52	16	8.0
3	4.5	4.2	2.7	2.7	2.2	2.1	2.1	6.7	70	45	15	7.8
4	4.3	3.9	3.0	2.8	2.1	2.0	2.5	6.4	97	44	15	7.5
5	4.3	4.7	3.1	2.8	2.2	1.9	2.4	7.3	81	44	15	7.3
6	4.4	3.7	3.0	2.8	2.4	2.1	2.5	8.0	81	40	15	7.3
7	4.3	3.5	3.1	2.6	2.5	1.9	4.0	7.5	75	36	15	6.9
8	4.2	3.6	2.8	2.6	2.6	2.0	4.5	7.3	76	33	14	6.6
9	4.3	3.7	2.8	2.5	2.2	1.9	3.7	6.9	90	31	14	6.6
10	4.3	3.8	3.0	2.5	2.2	1.9	3.1	6.9	92	29	13	6.9
11	4.2	3.9	3.1	2.5	2.2	1.6	3.6	7.2	98	27	13	7.5
12	4.2	3.8	3.2	2.2	2.2	1.6	4.8	9.0	100	26	12	8.0
13	4.7	3.6	3.3	2.4	2.2	1.6	5.0	14	91	25	12	7.2
14	5.1	3.4	3.3	2.6	2.2	1.6	5.6	20	81	24	11	7.3
15	4.7	3.3	3.1	2.6	2.2	1.6	6.0	26	83	23	11	7.1
16	4.5	3.6	3.1	2.5	2.2	1.6	5.8	29	84	21	12	6.4
17	4.7	3.0	3.3	2.4	2.2	1.6	5.7	37	81	20	12	6.0
18	4.2	2.8	3.1	2.7	2.1	1.5	5.4	38	85	19	11	5.8
19	4.0	3.0	3.3	2.6	2.2	1.5	5.3	40	82	19	11	5.7
20	4.1	3.4	3.0	2.4	2.2	1.6	5.8	34	77	18	10	5.6
21	4.2	3.7	3.0	2.6	2.2	1.7	6.4	28	81	18	10	5.6
22	4.2	3.5	3.0	2.5	2.1	1.8	5.7	24	98	17	10	5.8
23	4.3	3.4	3.1	2.4	2.1	1.8	5.5	24	96	18	10	5.8
24	4.3	3.3	3.0	2.4	2.1	1.6	5.3	25	85	17	9.6	5.7
25	4.5	3.7	3.0	2.4	2.1	1.6	4.8	28	85	16	9.3	5.5
26	4.3	3.6	3.0	2.4	2.1	1.8	4.8	32	81	16	9.0	5.5
27	4.3	3.3	2.8	2.5	2.2	2.2	4.8	38	76	16	9.3	5.3
28	4.3	3.3	2.8	2.4	2.2	2.0	4.7	42	69	16	8.8	5.3
29	4.3	3.0	2.8	2.4	2.0	1.7	5.0	53	68	16	8.5	5.3
30	4.5	2.6	2.7	2.2	---	1.7	6.7	67	60	15	8.5	5.5
31	4.7	---	2.7	2.2	---	1.8	---	60	---	16	8.2	---
TOTAL	135.9	107.7	92.0	78.0	63.8	55.4	135.2	747.5	2422	812	366.2	195.0
MEAN	4.38	3.59	2.97	2.52	2.20	1.79	4.51	24.1	80.7	26.2	11.8	6.50
MAX	5.1	4.7	3.3	2.8	2.6	2.2	6.7	67	100	55	18	8.2
MIN	4.0	2.6	2.4	2.2	2.0	1.5	1.8	6.4	49	15	8.2	5.3
AC-FT	270	214	182	155	127	110	268	1480	4800	1610	726	387

CAL YR 1987 TOTAL 3900.1 MEAN 10.7 MAX 67 MIN 1.4 AC-FT 7740
WTR YR 1988 TOTAL 5210.7 MEAN 14.2 MAX 100 MIN 1.5 AC-FT 10340

09024000 FRASER RIVER NEAR WINTER PARK, CO

LOCATION.--Lat 39°54'00", long 105°46'34", in SE¼ sec.4, T.2 S., R.75 W., Grand County, Hydrologic Unit 14010001, on left bank 500 ft downstream from bridge on U.S. Highway 40, 1.1 mi northwest of Winter Park, 2.0 mi upstream from Vasquez Creek, 3.5 mi downstream from point of diversion for Moffat water tunnel, and 3.9 mi southeast of Fraser.

DRAINAGE AREA.--27.6 mi².

PERIOD OF RECORD.--September 1910 to current year. Monthly discharge only for some periods, published in WSP 1313. Published as "near Arrow" 1910-23 and as "near West Portal" 1924-39. Records since June 9, 1936, equivalent to earlier records if transmountain diversions are added to flow past station.

REVISED RECORDS.--WSP 929: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 8,906.23 ft, Colorado State Highway Datum (levels by U.S. Geological Survey). Sept. 23, 1910, to May 12, 1916, nonrecording gage at trail bridge 0.6 mi upstream at different datum.

REMARKS.--Estimated daily discharges: Nov. 9, 10, 12, 13, 15-21, 25, Nov. 28 to Dec. 2, Dec. 9-12, 22-24, and Feb. 4 to Apr. 22. Records good except for estimated daily discharges, which are poor. Transmountain diversions upstream from station through Berthoud Pass ditch (see elsewhere in this report) and to Moffat water tunnel (not known since 1968). Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 820 ft³/s, June 13, 1918, gage height, 2.9 ft; minimum daily determined, 2.0 ft³/s, Mar. 30, Apr. 9, 1912, Jan 23, 1915.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 216 ft³/s at 2300 June 9, gage height, 1.80 ft; minimum daily, 3.3 ft³/s, Nov. 11.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	4.9	3.6	4.6	4.7	4.5	4.0	18	31	91	10	9.4
2	13	5.9	3.7	4.5	4.5	4.5	4.2	14	33	72	9.7	8.5
3	13	4.9	3.7	4.7	4.5	4.5	4.5	12	36	63	9.9	9.2
4	13	4.9	3.6	4.7	4.5	4.5	4.7	11	38	53	9.7	9.8
5	13	3.6	4.0	4.8	4.5	4.5	5.0	14	35	35	9.8	9.6
6	12	3.8	4.3	4.9	4.5	4.5	5.4	16	35	18	9.8	9.7
7	12	3.8	4.2	4.8	4.5	4.5	6.2	13	43	13	11	9.8
8	12	3.8	3.8	4.7	4.5	4.5	7.0	13	33	20	10	9.8
9	12	3.7	3.8	4.8	4.5	4.5	6.2	12	40	18	10	9.7
10	11	3.5	3.9	4.7	4.5	4.5	5.0	12	54	17	9.8	9.9
11	11	3.3	3.9	4.6	4.5	4.0	5.6	13	34	16	9.8	10
12	11	3.4	4.0	4.8	4.5	3.7	6.4	19	29	14	9.9	10
13	12	3.4	4.0	4.3	4.5	3.7	7.4	21	26	13	11	10
14	14	3.4	4.1	4.7	4.5	3.7	9.0	22	24	14	11	10
15	13	3.5	4.0	4.6	4.5	3.7	13	23	22	14	11	8.6
16	11	3.5	4.1	4.6	4.5	3.7	13	26	21	13	12	6.0
17	5.4	3.6	4.1	4.5	4.5	3.7	12	25	20	13	11	5.4
18	4.8	3.7	4.2	4.7	4.5	3.5	12	28	19	13	11	5.3
19	5.9	3.7	4.2	4.6	4.5	3.5	11	33	19	15	10	4.9
20	5.5	3.7	4.2	4.8	4.5	3.7	11	28	18	13	10	6.7
21	5.9	3.7	4.2	4.7	4.5	3.7	10	23	40	9.9	11	11
22	5.1	3.7	4.4	4.6	4.5	4.0	10	13	139	10	10	11
23	6.3	3.7	4.7	4.5	4.5	4.0	10	19	128	11	10	8.8
24	4.6	3.5	4.8	4.5	4.5	4.0	9.0	23	50	10	9.9	5.7
25	4.9	3.6	5.0	4.8	4.5	4.0	8.6	25	39	11	9.8	5.6
26	4.4	3.7	5.0	4.6	4.5	4.0	9.1	28	40	11	10	5.5
27	4.2	3.6	5.1	4.5	4.5	4.8	8.4	29	87	10	9.6	5.9
28	3.9	3.6	4.9	4.4	4.5	4.5	8.6	33	142	10	9.7	6.0
29	4.0	3.6	4.8	4.3	4.5	4.2	13	36	169	11	9.6	5.9
30	4.9	3.6	4.9	4.5	---	4.0	17	37	123	10	9.4	6.0
31	5.4	---	4.8	4.5	---	4.0	---	33	---	11	9.4	---
TOTAL	271.2	114.3	132.0	143.3	130.7	127.1	256.3	673	1567	652.9	314.8	243.7
MEAN	8.75	3.81	4.26	4.62	4.51	4.10	8.54	21.9	52.2	21.1	10.2	8.12
MAX	14	5.9	5.1	4.9	4.7	4.8	17	37	169	91	12	11
MIN	3.9	3.3	3.6	4.3	4.5	3.5	4.0	11	18	9.9	9.4	4.9
AC-FT	538	227	262	284	259	252	508	1340	3110	1300	624	483

CAL YR 1987 TOTAL 5432.6 MEAN 14.9 MAX 184 MIN 3.3 AC-FT 10780
WTR YR 1988 TOTAL 4631.3 MEAN 12.7 MAX 169 MIN 3.3 AC-FT 9190

09025000 VASQUEZ CREEK AT WINTER PARK, CO
(Formerly published as Vasquez Creek near Winter Park, CO)

LOCATION.--Lat 39°55'13", long 105°47'05", in NE¼NW¼ sec.33. T.1 S., R.75 W., Grand County, Hydrologic Unit 14010001, on right bank 30 ft downstream from bridge on U.S. Highway 40, 0.2 mi upstream from mouth, 2.5 mi northwest of Winter Park, 2.5 mi southeast of Fraser, and 4.5 mi downstream from Moffat water tunnel diversion.

DRAINAGE AREA.--27.8 mi^2.

PERIOD OF RECORD.--June to August 1907, July to November 1909, October 1933 to current year. Monthly discharge only for some periods, published in WSP 1313. Records for June to October 1908, published in WSP 269, are unreliable and should not be used. Published as Vasquez River at lower station, near Fraser 1907-9, as "near West Portal" 1934-39, and as "near Winter Park" 1940-87. Records for May 26, 1937, to September 1959, equivalent to earlier records if diversion to Moffat water tunnel is added to flow past station.

REVISED RECORDS.--See PERIOD OF RECORD.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 8,768.48 ft above National Geodetic Vertical Datum of 1929. June 1, 1907, to Oct. 31, 1909, nonrecording gage at site 0.8 mi upstream at different datum.

REMARKS.--Estimated daily discharges: Nov. 7 to Apr. 2. Records good except for estimated daily discharges, which are poor. Transmountain diversions upstream from station to Moffat water tunnel not known since 1959. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 526 ft^3/s, June 27, 1983, gage height, 4.14 ft, from rating curve extended above 286 ft^3/s; no flow at times in 1944, 1946, 1956, 1960, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 211 ft^3/s at 2000 June 22, gage height, 3.04 ft; minimum daily, 3.0 ft^3/s, Mar. 4.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.1	4.9	3.5	3.3	3.1	3.1	4.0	11	19	71	13	10
2	4.2	5.4	3.5	3.2	3.1	3.1	4.2	9.9	20	66	12	11
3	4.1	5.0	3.5	3.2	3.1	3.1	4.4	8.9	21	59	11	10
4	4.1	4.7	3.5	3.2	3.1	3.0	4.6	8.6	28	49	11	10
5	4.1	4.6	3.5	3.2	3.1	3.1	4.7	11	18	36	11	10
6	4.0	5.0	3.5	3.2	3.1	3.1	5.0	12	16	17	11	10
7	4.0	4.7	3.5	3.2	3.1	3.1	6.1	11	18	12	11	10
8	3.9	4.5	3.5	3.2	3.1	3.1	6.1	11	15	12	11	10
9	3.9	4.5	3.5	3.2	3.1	3.1	5.0	10	15	12	10	9.9
10	3.9	4.5	3.5	3.2	3.1	3.1	5.5	10	16	12	11	10
11	3.9	4.5	3.5	3.2	3.1	3.1	6.0	10	16	11	10	11
12	3.8	4.5	3.5	3.2	3.1	3.1	6.8	14	14	10	11	11
13	4.1	4.5	3.5	3.2	3.1	3.1	6.8	18	14	10	11	11
14	5.0	4.5	3.3	3.2	3.1	3.1	6.8	22	12	13	11	11
15	4.4	4.5	3.3	3.2	3.1	3.1	7.0	26	11	10	11	9.7
16	4.4	4.0	3.3	3.2	3.1	3.2	7.7	28	12	8.5	13	4.8
17	4.3	4.0	3.3	3.2	3.1	3.2	8.2	30	13	6.9	14	5.9
18	4.6	4.0	3.3	3.2	3.1	3.2	7.2	30	11	9.0	14	5.9
19	4.5	4.0	3.3	3.2	3.1	3.2	8.0	34	10	8.8	12	5.8
20	4.4	4.0	3.3	3.2	3.1	3.3	8.6	29	15	8.9	10	5.7
21	4.4	4.0	3.3	3.1	3.1	3.3	9.4	25	20	9.0	10	5.7
22	4.5	4.0	3.3	3.1	3.1	3.3	9.1	23	103	9.5	10	5.8
23	4.6	4.0	3.3	3.1	3.1	3.3	7.7	22	136	9.4	10	5.7
24	4.8	4.0	3.3	3.1	3.1	3.3	7.1	24	86	9.2	10	5.7
25	5.1	4.0	3.3	3.1	3.1	3.3	7.1	23	59	8.9	10	5.6
26	5.0	4.0	3.3	3.1	3.1	3.4	7.4	25	63	8.5	10	5.6
27	4.7	4.0	3.3	3.1	3.1	3.4	7.0	25	73	10	10	5.5
28	4.5	4.0	3.3	3.1	3.1	3.5	6.9	25	88	10	10	5.5
29	4.6	4.0	3.3	3.1	3.1	3.6	8.2	23	98	11	10	5.5
30	5.1	4.0	3.3	3.1	---	3.7	11	22	78	11	11	5.4
31	5.1	---	3.3	3.1	---	3.8	---	21	---	12	10	---
TOTAL	136.1	130.3	104.9	98.2	89.9	100.4	203.6	602.4	1110	550.6	340	238.7
MEAN	4.39	4.34	3.38	3.17	3.10	3.24	6.79	19.4	37.0	17.8	11.0	7.96
MAX	5.1	5.4	3.5	3.3	3.1	3.8	11	34	136	71	14	11
MIN	3.8	4.0	3.3	3.1	3.1	3.0	4.0	8.6	10	6.9	10	4.8
AC-FT	270	258	208	195	178	199	404	1190	2200	1090	674	473

CAL YR 1987 TOTAL 3048.9 MEAN 8.35 MAX 105 MIN 1.5 AC-FT 6050
WTR YR 1988 TOTAL 3705.1 MEAN 10.1 MAX 136 MIN 3.0 AC-FT 7350

09025400 ELK CREEK NEAR FRASER, CO

LOCATION.--Lat 39°55'09", long 105°49'31", in SE¼NW¼ sec.31, T.1 S., R.75 W., Grand County, Hydrologic Unit 14010001, on right bank 100 ft upstream from unnamed tributary 1,150 ft downstream from West Elk Creek, 2.0 mi southwest of Fraser, and 2.5 mi upstream from mouth.

DRAINAGE AREA.--7.15 mi².

PERIOD OF RECORD.--September 1970 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 8,805 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 10 to Mar. 21. Records good except for estimated daily discharges, which are poor. Transmountain diversions upstream from station to Moffat water tunnel. Diversions for irrigation of about 100 acres of hay meadows upstream from station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 106 ft³/s, May 24, 1984, gage height, 3.13 ft, maximum gage height, 3.97 ft, Mar. 12, Apr. 10-16, 1987 (backwater from ice); minimum daily discharge, 0.10 ft³/s, Jan. 13, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 34 ft³/s at 1800 May 19, gage height, 2.34 ft; minimum daily, 0.33 ft³/s, Oct. 21, 23.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.40	.40	.42	.42	.40	.41	.52	6.4	6.0	7.9	3.7	1.0
2	.44	.50	.42	.42	.40	.41	.49	4.4	5.5	6.8	3.1	1.0
3	.44	.46	.42	.42	.40	.41	.45	3.5	5.1	6.2	2.2	.88
4	.45	.36	.42	.42	.40	.41	.50	3.9	4.8	6.3	1.6	.56
5	.46	.34	.42	.42	.40	.41	.53	5.6	4.4	6.5	1.6	.55
6	.48	.34	.44	.42	.40	.41	.57	6.1	3.9	5.6	1.6	.67
7	.53	.39	.44	.42	.40	.41	.79	5.2	6.4	4.3	1.7	.66
8	.55	.42	.44	.42	.40	.41	.90	5.3	6.4	3.4	1.7	.68
9	.55	.34	.44	.42	.40	.41	1.0	5.5	6.2	3.2	1.6	.69
10	.55	.34	.44	.42	.40	.41	.91	5.4	5.7	3.2	1.5	.71
11	.54	.34	.46	.42	.40	.41	.82	6.0	3.4	3.0	1.4	.82
12	.53	.34	.46	.42	.40	.41	1.1	8.1	2.9	2.7	1.5	.93
13	.63	.34	.46	.42	.40	.41	1.4	11	2.8	2.5	1.5	.89
14	.82	.34	.46	.42	.40	.41	1.6	14	2.6	2.7	1.4	1.1
15	.58	.34	.46	.42	.40	.41	1.7	16	2.3	2.7	1.3	1.0
16	.51	.36	.46	.40	.41	.41	1.9	17	2.1	2.7	1.6	.90
17	.43	.36	.46	.40	.41	.41	2.0	18	2.1	2.6	1.9	.83
18	.39	.36	.46	.40	.41	.41	2.5	19	2.1	2.5	1.8	.88
19	.38	.36	.46	.40	.41	.41	2.1	26	1.8	2.4	1.5	.94
20	.36	.36	.46	.40	.41	.41	2.5	21	1.9	2.3	1.3	1.0
21	.33	.38	.44	.40	.41	.41	3.0	19	3.0	2.2	1.3	1.0
22	.35	.38	.44	.40	.41	.41	2.7	17	7.5	2.1	1.4	1.1
23	.33	.38	.44	.40	.41	.41	2.1	14	18	2.1	1.4	1.1
24	.37	.38	.44	.40	.41	.42	1.7	13	16	2.1	1.4	1.1
25	.49	.38	.44	.40	.41	.42	1.6	9.8	16	2.0	1.2	1.0
26	.43	.40	.44	.40	.41	.43	1.6	9.1	15	2.0	1.2	1.0
27	.39	.40	.44	.40	.41	.51	1.7	9.4	13	2.0	1.3	.99
28	.35	.40	.44	.40	.41	.51	2.1	8.3	11	2.3	1.2	1.0
29	.37	.40	.44	.40	.41	.52	3.3	8.1	12	2.8	1.1	1.1
30	.40	.40	.44	.40	---	.52	6.0	7.5	9.8	3.0	1.1	1.1
31	.43	---	.44	.40	---	.52	---	6.8	---	3.2	1.0	---
TOTAL	14.26	11.29	13.74	12.70	11.74	13.28	50.08	329.4	199.7	105.3	49.1	27.18
MEAN	.46	.38	.44	.41	.40	.43	1.67	10.6	6.66	3.40	1.58	.91
MAX	.82	.50	.46	.42	.41	.52	6.0	26	18	7.9	3.7	1.1
MIN	.33	.34	.42	.40	.40	.41	.45	3.5	1.8	2.0	1.0	.55
AC-FT	28	22	27	25	23	26	99	653	396	209	97	54

CAL YR 1987 TOTAL 514.39 MEAN 1.41 MAX 11 MIN .33 AC-FT 1020
WTR YR 1988 TOTAL 837.77 MEAN 2.29 MAX 26 MIN .33 AC-FT 1660

09026500 ST. LOUIS CREEK NEAR FRASER, CO

LOCATION.--Lat 39°54'36", long 105°52'40", in SE¼SW¼ sec.34, T.1 S., R.76 W., Grand County, Hydrologic Unit 14010001, on left bank 300 ft downstream from West St. Louis Creek and 4.1 mi southwest of Fraser.

DRAINAGE AREA.--32.9 mi².

PERIOD OF RECORD.--October 1933 to current year. Prior to August 1934, monthly discharge only, published in WSP 1313. Records for May 1956 to September 1959, equivalent to earlier records if diversion to Moffat water tunnel is added to flow past station.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 8,980.17 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Nov. 9-26, Dec. 16-18, 23-28, and Jan. 11 to Apr. 21. Records good except for estimated daily discharges, which are poor. Transmountain diversions upstream from station to Moffat water tunnel not known since 1959. Several observations of specific conductance and water temperature were obtained and are publisned elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 470 ft³/s, June 15, 1952, gage height, 2.89 ft; maximum gage height, 3.21 ft, June 10, 1952 (backwater from log on control); minimum discharge not determined, probably occurred during January or February 1961.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 216 ft³/s at 1700 June 22, gage height, 2.19 ft; minimum daily, 5.0 ft³/s, Jan. 25, 26.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.1	7.6	5.8	6.1	5.2	5.4	6.0	12	38	66	[illegible]	11
2	6.1	8.3	6.0	6.1	5.2	5.4	6.0	11	37	[illegible]	[illegible]	11
3	6.0	7.6	6.2	6.1	5.2	5.4	6.0	11	37	56	15	[illegible]
4	6.0	6.8	6.1	6.1	5.2	5.4	6.0	9.7	45	[illegible]	[illegible]	[illegible]
5	6.0	6.2	6.1	6.1	5.2	5.4	6.0	11	49	53	[illegible]	[illegible]
6	5.9	7.2	6.1	6.3	5.2	5.4	6.1	12	53	39	[illegible]	[illegible]
7	5.9	6.3	6.1	6.3	5.2	5.4	6.3	11	59	28	[illegible]	11
8	5.9	6.2	6.0	6.3	5.2	5.4	6.5	11	44	33	[illegible]	11
9	5.9	6.2	6.0	6.3	5.2	5.4	6.7	10	41	27	[illegible]	11
10	5.9	6.2	6.1	6.3	5.2	5.4	6.9	10	45	[illegible]	18	10
11	5.9	6.2	6.1	6.0	5.2	5.4	7.2	11	40	28	18	11
12	5.8	6.2	6.0	5.9	5.4	5.4	7.4	14	39	[illegible]	19	12
13	6.6	6.2	5.9	5.8	5.4	5.4	7.7	18	37	26	17	11
14	8.2	6.2	6.0	5.7	5.4	5.4	7.9	21	36	[illegible]	17	12
15	7.5	6.2	6.3	5.6	5.4	5.4	8.2	25	36	[illegible]	16	11
16	7.4	6.2	6.9	5.4	5.4	5.6	8.4	33	37	[illegible]	17	9.0
17	6.2	6.2	6.9	5.3	5.4	5.6	8.8	35	37	23	[illegible]	7.7
18	6.1	6.0	6.9	5.2	5.4	5.6	9.2	38	29	38	[illegible]	7.6
19	6.5	6.0	6.8	5.2	5.4	5.6	9.4	43	33	31	[illegible]	7.6
20	5.7	6.0	6.4	5.2	5.4	5.6	9.6	38	33	23	[illegible]	7.4
21	6.5	6.0	6.2	5.2	5.4	5.6	9.8	35	36	[illegible]	14	7.2
22	7.1	6.0	6.1	5.2	5.4	5.6	10	33	115	22	14	7.6
23	6.4	6.0	6.0	5.2	5.4	5.6	9.7	33	162	23	[illegible]	7.5
24	7.6	6.0	6.0	5.2	5.4	5.6	8.9	34	113	23	[illegible]	7.4
25	8.9	6.0	6.0	5.0	5.4	5.6	8.3	36	64	23	[illegible]	7.3
26	8.0	6.0	6.0	5.0	5.4	6.0	9.8	37	43	[illegible]	[illegible]	7.2
27	6.9	6.1	5.9	5.2	5.4	6.0	7.9	38	77	[illegible]	[illegible]	[illegible]
28	6.8	5.9	5.9	5.2	5.4	6.0	9.2	38	106	[illegible]	[illegible]	7.4
29	6.4	6.0	5.9	5.2	5.4	6.0	10	40	106	[illegible]	[illegible]	7.0
30	7.5	5.9	5.9	5.2	---	6.0	12	41	89	[illegible]	11	7.2
31	7.5	---	6.1	5.2	---	6.0	---	40	---	[illegible]	11	---
TOTAL	205.2	189.9	190.7	174.1	154.4	173.0	240.9	788.7	1730	968	502	274.3
MEAN	6.62	6.33	6.15	5.62	5.32	5.58	8.03	25.4	57.7	31.2	16.2	9.14
MAX	8.9	8.3	6.9	6.3	5.4	6.0	12	43	162	66	[illegible]	12
MIN	5.7	5.9	5.8	5.0	5.2	5.4	6.0	9.7	29	19	11	7.0
AC-FT	407	377	378	345	306	343	478	1560	3430	1920	996	544

CAL YR 1987 TOTAL 5435.0 MEAN 14.9 MAX 127 MIN 5.2 AC-FT 10780
WTR YR 1988 TOTAL 5591.2 MEAN 15.3 MAX 162 MIN 5.0 AC-FT 11090

09032000 RANCH CREEK NEAR FRASER, CO

LOCATION.--Lat 39°57'00", long 105°45'54", in NW¼NE¼ sec.22, T.1 S., R.75 W., Grand County, Hydrologic Unit 14010001, on right bank 450 ft downstream from Middle Fork and 2.7 mi east of Fraser.

DRAINAGE AREA.--19.9 mi².

PERIOD OF RECORD.--August 1934 to current year. Records since May 15, 1949, equivalent to earlier records if diversion to Moffat water tunnel is added to flow past station.

REVISED RECORDS.--WSP 1243: 1935.

GAGE.--Water-stage recorder. Elevation of gage is 8,685 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Dec. 17-20, Mar. 26-29, Apr. 9-11. Records good. Diversion upstream from station for irrigation of hay meadows along Fraser River. Transmountain diversion upstream from station to Moffat water tunnel . Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 451 ft³/s, June 27, 1983, gage height, 3.96 ft; minimum daily, 0.40 ft³/s, Sept. 21, Oct. 6, 1960, Sept. 24-26, 1988.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 222 ft³/s at 0100 June 29, gage height, 3.07 ft; minimum daily, 0.40 ft³/s, Sept. 24-26.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	4.0	2.8	2.5	2.1	1.9	1.8	11	21	81	7.4	3.7
2	12	4.3	2.8	2.7	2.2	1.8	1.9	10	19	70	6.8	3.7
3	1.8	4.0	2.9	2.7	2.3	1.9	2.0	11	25	63	5.7	3.6
4	1.8	3.6	2.9	2.8	2.3	1.9	2.1	8.5	31	58	5.7	3.5
5	1.7	3.3	2.9	2.8	2.3	1.9	2.0	9.9	21	51	6.5	3.3
6	1.7	3.4	2.9	2.8	2.3	1.9	2.3	11	22	34	6.4	3.4
7	1.7	3.5	2.8	2.7	2.3	2.0	3.2	10	21	6.4	6.2	3.3
8	1.8	3.6	2.8	2.6	2.3	2.1	3.7	9.7	21	6.5	6.3	3.2
9	1.6	7.3	2.6	2.6	2.3	2.1	3.8	9.4	25	4.7	6.0	3.2
10	1.5	5.2	2.6	2.6	2.3	2.1	3.8	9.1	29	4.4	6.3	3.2
11	1.4	4.0	2.8	2.6	2.3	2.1	3.8	10	27	4.5	6.8	3.5
12	1.4	5.2	2.8	2.6	2.3	2.1	3.8	13	20	4.1	6.8	4.1
13	1.9	4.0	2.8	2.6	2.3	2.1	4.5	17	13	4.2	6.6	4.1
14	3.7	3.4	2.8	2.5	2.2	2.1	4.8	19	9.7	5.7	6.3	4.7
15	3.8	5.2	2.8	2.5	2.1	2.1	5.0	22	12	5.4	6.0	4.4
16	3.6	4.7	2.9	2.6	2.1	2.0	6.1	24	16	3.5	5.3	4.0
17	3.4	4.0	3.0	2.6	1.9	1.8	7.1	27	9.3	3.1	5.9	2.8
18	3.3	3.4	3.0	2.6	1.9	1.9	6.6	31	7.4	3.4	5.5	.53
19	3.5	4.0	3.0	2.6	1.9	1.8	7.0	40	8.0	6.9	4.8	.46
20	3.7	4.4	3.0	2.6	1.9	1.8	7.7	33	6.9	7.9	4.9	.45
21	5.3	4.6	3.0	2.4	1.9	2.0	8.4	28	11	7.2	4.8	.44
22	4.4	4.3	3.0	2.3	1.9	2.0	9.1	25	63	6.9	5.0	.43
23	4.0	3.8	3.0	2.3	1.9	1.8	6.4	23	91	7.7	4.5	.45
24	3.4	3.6	2.8	2.3	1.9	1.9	6.1	23	73	7.0	4.3	.40
25	3.8	3.3	2.6	2.3	1.9	1.9	5.1	23	63	7.2	4.2	.40
26	3.6	3.3	2.6	2.3	2.0	1.9	7.3	24	60	6.1	4.1	.40
27	3.3	3.1	2.6	2.3	2.1	1.9	5.1	27	63	5.9	4.2	.43
28	3.3	3.0	2.6	2.3	1.9	1.9	5.3	31	90	7.3	4.1	.47
29	3.3	2.9	2.6	2.3	1.9	1.9	7.1	38	133	7.5	3.9	.51
30	3.8	2.9	2.6	2.2	---	1.9	9.7	40	96	7.1	3.8	.56
31	4.2	---	2.6	2.1	---	1.8	---	30	---	7.2	3.8	---
TOTAL	99.2	119.3	86.9	77.7	61.0	60.3	151.5	647.6	1107.3	504.8	168.9	67.63
MEAN	3.20	3.98	2.80	2.51	2.10	1.95	5.05	20.9	36.9	16.3	5.45	2.25
MAX	12	7.3	3.0	2.8	2.3	2.1	9.7	40	133	81	7.4	4.7
MIN	1.4	2.9	2.6	2.1	1.9	1.8	1.8	8.5	6.9	3.1	3.8	.40
AC-FT	197	237	172	154	121	120	301	1280	2200	1000	335	134

CAL YR 1987 TOTAL 3168.1 MEAN 8.68 MAX 143 MIN 1.4 AC-FT 6280
WTR YR 1988 TOTAL 3152.13 MEAN 8.61 MAX 133 MIN .40 AC-FT 6250

09032100 CABIN CREEK NEAR FRASER, CO

LOCATION.--Lat 39°59'09", long 105°44'40", in NW¼SE¼ sec.2, T.1 S., R.75 W., Grand County, Hydrologic Unit 14010001, on right bank 200 ft downstream from concrete diversion dam, 2.7 mi upstream from mouth and 4.6 mi northeast of Fraser.

DRAINAGE AREA.--4.87 mi².

PERIOD OF RECORD.--October 1983 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 9,560 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 8 to May 19. Records good except for estimated daily discharges, which are poor. Transmountain diversion upstream from station to Moffat water tunnel. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--5 years, 6.76 ft³/s; 4,900 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 126 ft³/s, June 13, 1984, gage height, 2.37 ft; minimum daily, 0.04 ft³/s May 7, 1985.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 88 ft³/s at 2100 June 4, gage height, 2.20 ft; minimum daily, 1.1 ft³/s, Mar. 6-14.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.0	2.8	1.6	1.4	1.2	1.2	1.2	1.8	19	25	5.8	2.0
2	2.0	3.0	1.6	1.4	1.2	1.2	1.2	1.9	17	23	5.1	2.0
3	1.9	2.5	1.5	1.4	1.2	1.2	1.2	2.1	27	21	5.2	1.9
4	1.9	2.5	1.5	1.4	1.2	1.2	1.2	2.2	51	20	4.8	2.0
5	1.8	2.5	1.5	1.4	1.2	1.2	1.2	2.2	64	19	4.7	1.9
6	1.9	2.6	1.5	1.3	1.2	1.1	1.2	2.3	58	17	4.6	1.9
7	1.9	2.6	1.5	1.3	1.2	1.1	1.3	2.4	59	16	4.5	1.8
8	1.9	2.6	1.5	1.3	1.2	1.1	1.3	2.4	57	15	4.5	1.8
9	1.9	2.5	1.5	1.3	1.2	1.1	1.3	2.5	60	14	4.2	1.7
10	1.8	2.4	1.5	1.3	1.2	1.1	1.4	2.5	62	13	4.0	1.8
11	1.7	2.4	1.5	1.3	1.2	1.1	1.4	2.5	60	12	3.8	2.2
12	1.8	2.3	1.5	1.3	1.2	1.1	1.5	2.6	54	11	3.8	2.3
13	1.9	2.3	1.5	1.3	1.2	1.1	1.5	2.6	47	10	3.5	2.2
14	2.1	2.3	1.5	1.3	1.2	1.1	1.5	2.6	45	9.8	3.2	2.7
15	2.2	2.2	1.5	1.3	1.2	1.2	1.6	2.7	44	9.3	3.1	2.5
16	2.2	2.2	1.5	1.2	1.2	1.2	1.6	2.7	40	8.7	3.4	2.3
17	2.1	2.1	1.5	1.2	1.2	1.2	1.7	2.9	42	8.2	3.7	2.2
18	2.0	2.1	1.5	1.2	1.2	1.2	1.7	2.9	42	8.1	3.4	2.1
19	1.9	2.1	1.5	1.2	1.2	1.2	1.8	3.0	46	8.3	3.1	2.0
20	1.8	2.0	1.5	1.2	1.2	1.2	1.8	2.0	42	7.9	2.9	2.0
21	2.1	2.0	1.5	1.2	1.2	1.2	1.9	1.5	41	7.4	2.9	2.0
22	2.0	2.0	1.5	1.2	1.2	1.2	2.0	1.6	42	7.0	3.0	2.2
23	1.9	1.9	1.5	1.2	1.2	1.2	2.0	1.5	37	6.7	2.6	2.1
24	1.9	1.8	1.5	1.2	1.2	1.2	1.8	2.7	34	6.4	2.5	2.0
25	2.1	1.8	1.5	1.2	1.2	1.2	1.7	3.6	32	6.0	2.4	2.0
26	2.1	1.8	1.4	1.2	1.2	1.2	1.7	3.8	31	6.3	2.3	2.0
27	2.0	1.7	1.4	1.2	1.2	1.2	1.7	5.0	30	5.9	2.2	2.1
28	2.0	1.7	1.4	1.2	1.2	1.2	1.7	8.6	29	6.5	2.2	2.2
29	1.9	1.7	1.4	1.2	1.2	1.2	1.7	18	36	6.4	2.1	2.2
30	2.5	1.6	1.4	1.2	---	1.2	1.7	33	29	5.8	2.0	2.1
31	2.7	---	1.4	1.2	---	1.2	---	27	---	5.9	2.0	---
TOTAL	61.9	66.0	46.1	39.2	34.8	36.3	46.5	155.0	1277	346.6	107.5	62.2
MEAN	2.00	2.20	1.49	1.26	1.20	1.17	1.55	5.00	42.6	11.2	3.47	2.07
MAX	2.7	3.0	1.6	1.4	1.2	1.2	2.0	33	64	25	5.8	2.7
MIN	1.7	1.6	1.4	1.2	1.2	1.1	1.2	1.5	17	5.8	2.0	1.7
AC-FT	123	131	91	78	69	72	92	307	2530	687	213	123

CAL YR 1987 TOTAL 1982.0 MEAN 5.43 MAX 52 MIN 1.0 AC-FT 3930
WTR YR 1988 TOTAL 2279.1 MEAN 6.23 MAX 64 MIN 1.1 AC-FT 4520

09034250 COLORADO RIVER AT WINDY GAP NEAR GRANBY, CO

LOCATION.--Lat 40°06'30", long 106°00'13" in NW¼ sec.27, R.77 W., T.2 N., Grand County, Hydrologic Unit 14010001,on right bank 300 ft downstream from county highway bridge, 1.1 mi downstream from Windy Gap diversion dam, 2.4 mi downstream from mouth of Fraser River and 3.8 mi northwest of Granby.

DRAINAGE AREA.--789 mi².

PERIOD OF RECORD.--October 1981 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 7,790 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 16 to Mar. 27. Natural flow of stream affected by transmountain diversions, storage reservoirs, and diversions for irrigation. Records good except for estimated daily discharges, which are poor. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--7 years, 336 ft³/s; 243,400 acre-ft/year.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,260 ft³/s, May 25, 1984, gage height, 7.34 ft; minimum daily, 42 ft³/s, Oct. 11, 2, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,590 ft³/s at 0200 May 20, gage height, 4.77 ft; minimum daily, 61 ft³/s, Oct. 6.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	67	96	74	70	76	74	100	476	300	647	205	86
2	[illegible]	136	74	70	76	74	97	392	143	552	158	81
3	79	119	74	70	76	74	96	331	126	499	144	77
4	[illegible]	94	74	70	75	74	86	351	151	458	136	74
5	64	83	74	70	76	74	85	345	203	424	130	73
6	61	91	74	70	74	74	96	336	220	364	125	75
7	62	97	74	70	74	74	148	337	273	290	126	92
8	[illegible]	95	74	70	74	74	174	329	218	256	132	77
9	65	84	74	70	74	74	214	342	229	244	123	75
10	66	78	74	70	74	74	234	327	236	253	115	68
11	66	81	74	70	74	74	203	315	184	247	113	69
12	66	75	74	70	74	74	273	348	203	234	116	97
13	72	76	74	70	74	74	366	413	158	221	112	84
14	71	83	74	70	74	74	399	476	121	217	111	86
15	96	85	74	70	74	74	471	537	96	227	109	86
16	89	86	74	76	74	80	524	607	96	233	108	92
17	87	80	74	76	74	80	558	644	120	237	114	88
18	81	76	74	76	74	80	484	701	183	218	122	82
19	73	76	74	76	74	80	528	1130	195	205	113	77
20	73	76	74	76	74	80	489	1340	188	207	107	62
21	69	76	74	76	74	80	505	913	175	201	108	62
22	68	76	74	76	74	80	444	701	432	193	111	65
23	65	76	74	76	74	80	333	591	679	187	106	66
24	63	75	74	76	74	80	283	510	225	193	104	66
25	80	76	74	76	74	80	251	494	136	191	101	66
26	79	75	72	76	74	80	232	505	172	178	100	66
27	[illegible]	79	70	76	74	80	250	536	173	178	102	73
28	77	76	70	76	74	82	237	534	366	187	101	72
29	81	76	70	76	74	73	326	558	551	196	97	66
30	84	76	70	76	---	80	424	589	447	192	95	66
31	[illegible]	---	70	76	---	93	---	578	---	228	92	---
TOTAL	2317	2492	2270	2266	2156	2398	8880	16646	6999	8357	3636	2269
MEAN	74.7	83.1	73.2	73.1	74.3	77.4	296	537	233	270	117	75.6
MAX	96	119	74	76	76	93	558	1340	679	647	205	97
MIN	61	76	70	70	74	73	85	315	96	178	92	62
AC-FT	4600	4940	4500	4490	4280	4760	17610	33020	13880	16580	7210	4500

CAL YR 1987 TOTAL 56005 MEAN 153 MAX 1010 MIN 43 AC-FT 111100
WTR YR 1988 TOTAL 60686 MEAN 166 MAX 1340 MIN 61 AC-FT 120400

09034500 COLORADO RIVER AT HOT SULPHUR SPRINGS, CO

LOCATION.--Lat 40°05'00", long 106°05'15", in NE¼NE¼ sec.2, T.1 N., R.78W., Grand County, Hydrologic Unit 14010001, on left bank about 1,000 ft north of U.S. Highway 40, 1 mi northeast of Hot Sulphur Springs, and 4.5 mi upstream from Beaver Creek.

DRAINAGE AREA.--825 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1904 to current year. Monthly discharge only for some periods, published in WSP 1313. Prior to 1907 and 1914-18, published as Grand River at Hot Sulphur Springs, and as Grand River at Sulphur Springs 1907-13.

REVISED RECORDS.--WSP 1313: 1905. WSP 1924: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 7,670 ft, from railroad elevations. July 28, 1904, to Apr. 16, 1906, nonrecording gage on bridge 1.7 mi downstream at different datum. Apr. 17, 1906, to Sept. 18, 1930, nonrecording gage at bridge 1.4 mi downstream at datum 7,651.26 ft, National Geodetic Vertical Datum of 1929. Supplemental water-stage recorder (nonrecording gage prior to Jan. 1, 1963) at different datum at site 1.7 mi downstream, used for winter records some years.

REMARKS.--Estimated daily discharges: Nov. 16 to Apr. 10. Records good except for estimated daily discharges, which are poor. Flow affected by transmountain diversions, storage reservoirs, and diversions upstream from station for irrigation of about 13,000 acres.

AVERAGE DISCHARGE.--39 years (1905-09, 1911-47), 675 ft³/s; 489,000 acre-ft, prior to storage by Lake Granby; 35 years (1954-88), 246 ft³/s; 178,200 acre-ft, subsequent to storage by Lake Granby.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 10,300 ft³/s, June 15, 1921, gage height, 8.7 ft, site and datum then in use; minimum daily, 33 ft³/s, Sept. 27, 1956.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,550 ft³/s at 0300 May 20, gage height, 2.62 ft; minimum daily, 60 ft³/s, Sept. 21.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	67	94	76	70	72	76	100	482	386	596	220	88
2	69	104	76	70	74	76	100	416	217	538	162	83
3	74	120	74	70	74	76	98	358	170	498	146	79
4	66	100	74	70	74	76	90	381	201	460	143	77
5	65	91	74	70	74	78	90	371	248	433	139	76
6	62	87	74	70	74	78	120	417	279	390	135	80
7	62	100	74	70	74	78	160	375	311	326	135	94
8	64	100	74	70	74	78	190	364	290	296	143	75
9	65	92	74	70	74	78	230	376	260	286	132	79
10	66	84	74	70	74	78	220	357	311	302	124	67
11	66	86	74	70	74	78	220	347	248	297	117	68
12	66	85	74	70	74	78	326	372	271	283	119	95
13	71	81	74	70	76	78	422	431	221	262	120	82
14	90	87	72	70	76	78	439	492	178	248	115	82
15	96	93	72	70	76	78	495	559	149	273	112	82
16	90	92	72	70	76	82	538	626	143	285	113	88
17	86	88	72	70	76	82	578	664	147	294	120	83
18	81	84	72	70	76	82	499	722	209	276	129	78
19	79	80	72	70	76	82	539	1070	226	255	121	70
20	75	76	72	72	76	82	497	1330	224	260	109	63
21	71	76	72	72	76	84	512	917	205	243	111	60
22	69	76	72	72	76	84	472	710	416	231	118	61
23	69	76	72	72	76	84	371	609	674	215	111	61
24	71	76	72	72	76	84	322	529	275	196	109	61
25	86	76	72	72	76	84	291	512	168	203	105	62
26	87	76	70	72	76	84	265	529	183	196	105	64
27	78	76	70	72	76	84	280	572	204	198	106	68
28	75	76	70	72	76	84	262	572	380	196	108	71
29	81	76	70	72	76	76	327	593	541	195	100	62
30	83	76	70	72	---	86	423	632	473	194	99	63
31	93	---	70	72	---	100	---	614	---	221	96	---
TOTAL	2323	2584.0	2250	2194	2178	2506	9476	17299	8208	9146	3822	2222
MEAN	74.9	86.1	72.6	70.8	75.1	80.8	316	558	274	295	123	74.1
MAX	96	120	76	72	76	100	578	1330	674	596	220	95
MIN	62	76	70	70	72	76	90	347	143	194	96	60
AC-FT	4610	5130	4460	4350	4320	4970	18800	34310	16280	18140	7580	4410

CAL YR 1987 TOTAL 54880.0 MEAN 150 MAX 904 MIN 42 AC-FT 108900
WTR YR 1988 TOTAL 64208.0 MEAN 175 MAX 1330 MIN 60 AC-FT 127400

09034500 COLORADO RIVER AT HOT SULPHUR SPRINGS, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1947 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1947 to current year.
WATER TEMPERATURE: April 1949 to current year.

REMARKS.--Limited temperature data available in district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily, 524 microsiemens, Dec. 24, 1986; minimum daily, 48 microsiemens, June 2, 1947.
WATER TEMPERATURE: Maximum daily, 29°C, Aug. 3, 1981; minimum daily, freezing point on many days during winter months each year.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum daily, 230 microsiemens, Dec. 26; minimum daily, 81 microsiemens, May 30.
WATER TEMPERATURE: Maximum daily, 23°C, Aug. 14 and 16; minimum daily, freezing point on many days during winter months.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (US/CM)	PH (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	HARDNESS TOTAL (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)
JAN									
07...	1200	69	125	--	0.0	--	54	17	2.9
APR									
27...	1430	275	152	7.8	8.0	11.9	55	17	3.1
JUN									
29...	1445	627	91	7.1	15.0	7.2	41	13	2.1
SEP									
19...	1215	69	134	--	9.0	9.8	55	17	3.1

DATE	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY LAB (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)
JAN									
07...	6.5	0.4	1.1	59	8.1	2.2	0.2	13	88
APR									
27...	6.9	0.4	1.5	62	13	2.8	0.2	12	94
JUN									
29...	3.9	0.3	1.0	43	7.2	1.1	0.3	10	65
SEP									
19...	6.8	0.4	1.3	64	7.6	2.0	0.2	30	107

DATE	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)	RESIDUE TOTAL AT 105 DEG. C, SUSPENDED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN,AMMONIA + ORGANIC DIS. (MG/L AS N)	PHOSPHOROUS TOTAL (MG/L AS P)	PHOSPHOROUS DISSOLVED (MG/L AS P)
JAN									
07...	0.12	16.4	2	0.30	0.26	0.4	0.3	0.05	<0.01
APR									
27...	0.13	69.7	<1	<0.10	<0.10	0.3	0.3	0.05	0.04
JUN									
29...	0.09	109	21	<0.10	<0.10	0.4	0.4	0.04	0.03
SEP									
19...	0.14	19.9	<1	<0.10	<0.10	0.3	0.3	0.04	0.04

09034500 COLORADO RIVER AT HOT SULPHUR SPRINGS, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	ANTI-MONY, DIS-SOLVED (UG/L AS SB)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)
JAN									
07...	<1	2	1	24	<0.5	<1	<1	1	<1
APR									
27...	<1	1	1	22	<0.5	13	<1	2	<1
JUN									
29...	1	1	<1	20	<0.5	1	<1	2	<1
SEP									
19...	<1	2	1	70	<0.5	<1	2	1	<1

DATE	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)
JAN								
07...	2	2	89	<5	<5	11	<0.1	<0.1
APR								
27...	5	8	170	<5	<5	26	<0.1	<0.1
JUN								
29...	2	2	81	10	<5	18	<0.1	<0.1
SEP								
19...	4	2	280	<5	<5	44	<0.1	<0.1

DATE	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
JAN								
07...	<1	1	<1	<1	<1	1.0	<10	6
APR								
27...	4	<1	<1	<1	<1	<1.0	<10	7
JUN								
29...	2	1	<1	<1	<1	2.0	10	7
SEP								
19...	3	3	<1	<1	<1	<1.0	<10	<3

09034500 COLORADO RIVER AT HOT SULPHUR SPRINGS, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
ONCE DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	135	149	140	134	133	135	143	124	100	95	142	126
2	133	150	129	135	134	133	142	124	92	98	138	124
3	141	148	134	138	132	133	151	122	122	100	147	136
4	135	150	123	138	132	128	150	125	108	105	150	131
5	137	150	135	135	131	135	150	121	101	107	148	133
6	138	152	129	133	134	134	145	120	106	114	149	134
7	137	148	135	127	130	135	153	121	100	123	146	136
8	134	147	138	130	134	135	144	118	108	127	147	127
9	145	148	136	128	132	136	141	116	119	136	147	126
10	145	148	130	124	134	135	154	117	109	134	142	130
11	144	147	128	127	133	135	173	116	112	138	140	126
12	145	148	132	126	134	136	151	115	112	138	140	133
13	146	144	141	129	135	140	144	113	120	140	139	134
14	146	---	143	128	133	136	142	106	128	142	134	134
15	147	148	144	135	138	136	138	98	133	142	138	131
16	147	143	153	134	134	137	136	93	136	142	132	138
17	146	141	146	135	132	136	132	90	135	143	133	---
18	145	137	140	135	130	---	140	87	132	143	133	136
19	148	148	145	135	132	138	138	91	133	143	130	141
20	146	139	139	135	135	141	130	103	134	142	130	138
21	147	140	144	139	134	143	129	100	136	141	130	138
22	147	143	176	136	131	140	130	102	128	143	126	140
23	150	140	139	135	131	138	137	102	98	140	130	146
24	149	134	156	134	122	140	149	106	109	136	128	141
25	148	134	142	135	126	140	147	106	122	137	126	141
26	147	142	230	134	136	141	152	104	119	138	127	144
27	147	134	151	134	137	146	154	---	122	138	127	149
28	148	137	137	135	138	147	114	100	113	136	129	146
29	149	139	138	130	135	146	147	82	---	136	125	146
30	148	149	136	130	---	163	142	81	95	134	134	141
31	148	---	135	132	---	146	---	94	---	133	129	---
MEAN	144	---	143	133	133	---	143	---	---	131	136	---

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
ONCE DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.0	9.0	0.0	0.0	0.0	0.0	0.0	9.0	13.0	16.0	19.0	17.0
2	13.0	6.0	.0	.0	.0	.0	.0	5.0	10.0	16.0	18.0	19.0
3	5.0	7.0	.0	.0	.0	.0	.0	8.0	10.0	16.0	19.0	17.0
4	11.0	4.0	.0	.0	.0	.0	.0	8.0	19.0	16.0	21.0	17.0
5	12.0	4.0	.0	.0	.0	.0	.0	9.0	17.0	16.0	22.0	18.0
6	12.0	4.0	.0	.0	.0	.0	2.0	7.0	15.0	17.0	20.0	16.0
7	11.0	5.0	.0	.0	.0	.0	1.0	4.0	16.0	19.0	19.0	16.0
8	6.0	7.0	.0	.0	.0	.0	.0	7.0	18.0	15.0	18.0	17.0
9	10.0	5.0	.0	.0	.0	.0	.0	5.0	15.0	16.0	20.0	18.0
10	12.0	5.0	.0	.0	.0	.0	3.0	8.0	15.0	19.0	20.0	12.0
11	11.0	5.0	.0	.0	.0	.0	9.0	8.0	15.0	16.0	19.0	12.0
12	10.0	10.0	.0	.0	.0	.0	5.0	11.0	17.0	16.0	18.0	13.0
13	10.0	5.0	.0	.0	.0	.0	2.0	11.0	17.0	19.0	19.0	9.0
14	7.0	---	.0	.0	.0	.0	5.0	11.0	19.0	19.0	23.0	11.0
15	5.0	3.0	.0	.0	.0	.0	5.0	11.0	18.0	16.0	20.0	11.0
16	10.0	4.0	.0	.0	.0	.0	5.0	11.0	17.0	15.0	23.0	6.0
17	10.0	.0	.0	.0	.0	.0	4.0	11.0	17.0	15.0	17.0	---
18	8.0	.0	.0	.0	.0	---	6.0	9.0	17.0	18.0	17.0	12.0
19	4.0	.0	.0	.0	.0	.0	7.0	8.0	20.0	17.0	20.0	5.0
20	8.0	.0	.0	.0	.0	.0	6.0	8.0	20.0	18.0	19.0	13.0
21	7.0	.0	.0	.0	.0	.0	4.0	7.0	15.0	19.0	20.0	15.0
22	7.0	.0	.0	.0	.0	.0	4.0	7.0	17.0	18.0	19.0	13.0
23	3.0	.0	.0	.0	.0	.0	4.0	8.0	13.0	17.0	20.0	8.0
24	8.0	.0	.0	.0	.0	.0	4.0	12.0	18.0	18.0	20.0	14.0
25	6.0	.0	.0	.0	.0	.0	3.0	11.0	21.0	16.0	20.0	12.0
26	5.0	.0	.0	.0	.0	.0	9.0	12.0	17.0	16.0	17.0	9.0
27	8.0	.0	.0	.0	.0	.0	7.0	---	17.0	18.0	18.0	8.0
28	8.0	.0	.0	.0	.0	.0	8.0	7.0	13.0	17.0	12.0	7.0
29	6.0	.0	.0	.0	.0	.0	12.0	14.0	---	17.0	19.0	5.0
30	5.0	.0	.0	.0	---	.0	8.0	13.0	13.0	20.0	17.0	10.0
31	9.0	---	.0	.0	---	.0	---	10.0	---	16.0	19.0	---
MEAN	8.2	---	.0	.0	.0	---	4.1	---	---	17.0	19.1	---

09034900 BOBTAIL CREEK NEAR JONES PASS, CO

LOCATION.--Lat 39°45'37", long 105°54'21", in sec.28, T.3 S., R.76 W., Grand County, Hydrologic Unit 14010001, on left bank 320 ft upstream from diversion dam and 0.4 mi south of entrance to August P. Gumlick Tunnel.

DRAINAGE AREA.--5.49 mi².

PERIOD OF RECORD.--October 1965 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 10,430 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 12, 16-23, 27-29, Nov. 2 to May 16, Sept. 19, 29, 30. Records good except for estimated daily discharges, which are poor. No diversion upstream from station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--23 years, 10.3 ft³/s; 7,460 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 290 ft³/s, June 28, 1988, gage height, 5.19 ft; maximum recorded gage height, 7.57 ft, May 15, 1984 (backwater from ice); minimum daily discharge, 0.44 ft³/s, Feb. 11, 1972.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 90 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
June 9	1800	162	4.61	June 28	1500	*290	*5.19

Minimum daily, 0.78 ft³/s, Mar. 6-18.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	1.6	1.4	1.1	.84	.80	.80	1.7	26	51	7.7	3.4
2	1.6	1.6	1.4	1.1	.84	.80	.84	1.7	31	44	6.9	3.2
3	1.6	1.6	1.4	1.1	.82	.80	.86	1.8	54	37	6.4	2.9
4	1.6	1.6	1.4	1.1	.82	.80	.88	1.8	87	37	6.2	2.8
5	1.4	1.6	1.4	1.1	.82	.80	.92	1.8	87	33	5.9	2.6
6	1.5	1.6	1.4	1.1	.82	.78	.94	1.8	97	30	6.4	2.6
7	1.6	1.6	1.4	1.0	.82	.78	.98	1.9	93	28	7.1	2.5
8	1.4	1.6	1.3	1.0	.82	.78	1.0	1.9	97	27	6.9	2.4
9	1.4	1.6	1.3	1.0	.82	.78	1.0	1.9	113	24	5.9	2.4
10	1.2	1.5	1.3	1.0	.82	.78	1.1	2.0	122	22	5.5	2.6
11	1.3	1.5	1.3	1.0	.82	.78	1.1	2.0	101	20	5.3	3.2
12	1.6	1.5	1.3	.98	.82	.78	1.1	2.0	94	18	5.1	3.2
13	1.6	1.5	1.3	.98	.82	.78	1.2	3.5	76	18	4.6	3.1
14	1.9	1.5	1.3	.96	.82	.78	1.2	17	69	17	4.3	3.2
15	1.6	1.5	1.3	.96	.82	.78	1.3	45	75	15	4.3	3.1
16	1.6	1.5	1.3	.94	.82	.78	1.3	26	84	14	5.0	2.7
17	1.6	1.5	1.3	.94	.80	.78	1.3	23	81	12	5.3	2.5
18	1.6	1.5	1.3	.92	.80	.78	1.4	28	83	11	4.7	2.4
19	1.6	1.5	1.3	.92	.80	.80	1.4	27	89	11	4.3	2.4
20	1.6	1.5	1.3	.90	.80	.80	1.5	15	88	9.7	4.1	2.3
21	1.6	1.5	1.2	.90	.80	.80	1.5	11	88	8.8	4.1	2.2
22	1.6	1.5	1.2	.88	.80	.80	1.5	9.1	85	7.9	4.1	2.9
23	1.6	1.5	1.2	.88	.80	.80	1.5	8.8	80	7.7	3.9	2.5
24	1.6	1.4	1.2	.86	.80	.80	1.6	13	72	7.4	3.6	2.4
25	1.4	1.4	1.2	.86	.80	.80	1.6	18	71	7.1	3.6	2.2
26	1.3	1.4	1.2	.84	.80	.80	1.6	22	66	7.4	3.7	2.1
27	1.6	1.4	1.2	.84	.80	.80	1.6	28	58	6.9	3.7	2.1
28	1.6	1.4	1.2	.84	.80	.80	1.7	35	98	6.9	3.6	2.2
29	1.6	1.4	1.1	.84	.80	.80	1.7	44	93	7.7	3.4	2.2
30	1.4	1.4	1.1	.84	---	.80	1.7	43	63	6.9	3.2	2.2
31	1.6	---	1.1	.84	---	.80	---	31	---	8.7	3.2	---
TOTAL	47.9	45.2	39.6	29.52	23.56	24.54	38.12	469.7	2421	562.1	152.0	78.5
MEAN	1.55	1.51	1.28	.95	.81	.79	1.27	15.2	80.7	18.1	4.90	2.62
MAX	1.9	1.6	1.4	1.1	.84	.80	1.7	45	122	51	7.7	3.4
MIN	1.2	1.4	1.1	.84	.80	.78	.80	1.7	26	6.9	3.2	2.1
AC-FT	95	90	79	59	47	49	76	932	4800	1110	301	156

CAL YR 1987 TOTAL 2818.72 MEAN 7.72 MAX 66 MIN .76 AC-FT 5590
WTR YR 1988 TOTAL 3931.74 MEAN 10.7 MAX 122 MIN .78 AC-FT 7800

09035500 WILLIAMS FORK BELOW STEELMAN CREEK, CO

LOCATION.--Lat 39°46'44", long 105°55'40", in sec.20, T.3 S., R.75 W., Grand County, Hydrologic Unit 14010001, on right bank 700 ft downstream from Steelman Creek and 6.5 mi southeast of Leal.

DRAINAGE AREA.--16.3 mi².

PERIOD OF RECORD.--July 1933 to September 1941, published as Williams River below Steelman Creek, October 1965 to current year. Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder. Elevation of gage is 9,800 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to July 21, 1933, nonrecording gage, and July 21, 1933, to Sept. 30, 1941, water-stage recorder at site 600 ft upstream at different datum.

REMARKS.--Estimated daily discharges: Nov. 12 to June 24, and June 30 to July 15. Records fair except for estimated daily discharges, which are poor. Transmountain diversions upstream from station through August P. Gumlick Tunnel (station 09036000) since May 10, 1940. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--31 years, 26.1 ft³/s; 18,910 acre-ft/yr. The figures published in the 1986, and 1987 reports are in error; the correct figures are; 29 years, 26.4 ft³/s, 19,130 acre-ft/yr; and 30 years, 26.1 ft³/s; 18,910 acre-ft/yr, including diversions to August P. Gumlick Tunnel.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 441 ft³/s, June 21, 1938, gage height, 2.48 ft, site and datum then in use, from rating curve extended above 260 ft³/s; maximum gage height, 6.96 ft, May 15, 1984 (backwater from ice); minimum daily discharge, 0.20 ft³/s, Mar. 6, 1967.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, unknown, occurred June 10; minimum daily, 0.55 ft³/s, Sept. 26, 27.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	[illegible]	[illegible]	.80	.54	.66	.71	3.7	31	105	23	.91
2	[illegible]	[illegible]	[illegible]	[illegible]	.54	[illegible]	.77	[illegible]	36	97	21	.88
3	[illegible]	[illegible]	[illegible]	[illegible]	.54	[illegible]	[illegible]	3.2	48	89	20	.74
4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	93	95	18	.69
5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	137	85	16	.69
6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.66	[illegible]	[illegible]	145	72	18	.64
7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	4.0	20	.64
8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	157	2.2	19	.59
9	[illegible]	[illegible]	[illegible]	[illegible]	.66	[illegible]	[illegible]	[illegible]	203	2.0	17	.59
10	.97	[illegible]	.80	[illegible]	[illegible]	.66	[illegible]	3.8	210	1.9	15	.69
11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	33	[illegible]	.85
12	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	14	.96
13	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.79
14	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	96	49	12	.97
15	1.6	.94	[illegible]	[illegible]	[illegible]	[illegible]	1.3	7.8	[illegible]	[illegible]	11	.91
16	3.8	.88	.80	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	100	39	19	.75
17	1.6	.80	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	126	35	15	.69
18	[illegible]	.80	[illegible]	.63	.66	[illegible]	[illegible]	15	167	34	13	.64
19	[illegible]	.80	[illegible]	.59	[illegible]	[illegible]	[illegible]	[illegible]	171	[illegible]	11	.64
20	1.6	.80	.80	.64	.66	2.8	2.6	12	173	29	11	.64
21	3.7	.80	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	177	[illegible]	11	.59
22	[illegible]	[illegible]	[illegible]	[illegible]	.66	[illegible]	[illegible]	8.0	179	26	11	.71
23	[illegible]	[illegible]	[illegible]	[illegible]	.66	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	9.6	.72
24	[illegible]	[illegible]	[illegible]	[illegible]	.66	[illegible]	[illegible]	[illegible]	[illegible]	24	9.3	.64
25	1.5	.80	.80	.64	.55	.66	[illegible]	9.5	153	23	8.8	.59
26	3.0	.80	.80	.63	.66	[illegible]	3.4	11	147	23	9.0	.55
27	[illegible]	.80	.80	[illegible]	.66	.66	[illegible]	13	132	22	[illegible]	.55
28	3.8	.80	.80	.63	.66	.66	[illegible]	15	154	22	8.5	.58
29	5.6	.80	.80	[illegible]	.66	.66	2.7	37	153	23	[illegible]	.62
30	3.3	.80	.80	[illegible]	---	.66	3.2	47	126	23	1.1	.64
31	1.6	---	.80	.63	---	.66	---	51	---	26	.91	---
TOTAL	66.96	35.72	24.80	29.55	19.37	39.16	55.42	352.7	4261	1201.1	399.81	21.09
MEAN	2.16	1.19	.80	.95	.66	1.26	1.85	11.4	142	38.7	12.9	.70
MAX	5.6	3.3	.80	2.5	.66	2.9	3.2	51	210	105	23	.97
MIN	.91	.80	.80	.63	.54	.66	.71	3.0	31	1.9	.91	.55
AC-FT	133	71	49	59	38	78	110	700	8453	2380	793	42

CAL YR 1987 TOTAL 5321.30 MEAN 14.6 MAX 153 MIN .35 AC-FT 10550
WTR YR 1988 TOTAL 6506.42 MEAN 17.8 MAX 210 MIN .55 AC-FT 12910

09035700 WILLIAMS FORK ABOVE DARLING CREEK, NEAR LEAL, CO

LOCATION.--Lat 39°47'22", long 106°01'18", in NW¼SW¼ sec.16, T.3 S., R.77 W., Grand County, Hydrologic Unit 14010001, on left bank 1.0 mi upstream from Darling Creek and 1.9 mi southeast of Leal.

DRAINAGE AREA.--34.7 mi².

PERIOD OF RECORD.--October 1965 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 8,970 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Oct. 1, 1972, May 6, 1981 to Jan. 31, 1983, at site 0.6 mi downstream at different datum.

REMARKS.--Estimated daily discharges: Nov. 14 to Apr. 14. Records good except for estimated daily discharges, which are poor. Transmountain diversion upstream from station through August P. Gumlick Tunnel (station 09036000). Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--23 years, 38.0 ft³/s; 27,530 acre-ft/yr. The figure published in the 1987 report was in error; the correct figure is, 22 years, 38.2 ft³/s; 27,680 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 677 ft³/s, June 24, 1971, gage height, 7.12 ft, site and datum then in use, from rating curve extended above 430 ft³/s; minimum daily, 2.7 ft³/s, Apr. 5, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 370 ft³/s at 2130 June 9, gage height, 5.02 ft; minimum daily, 4.8 ft³/s, Mar. 1-5.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.4	7.5	6.0	6.0	5.0	4.8	5.4	22	62	175	40	11
2	6.1	8.0	6.0	6.0	5.0	4.8	5.4	19	[illegible]	167	34	11
3	6.0	7.0	6.0	6.0	5.0	4.8	6.0	[illegible]	[illegible]	148	33	10
4	6.0	6.0	6.0	6.0	5.0	4.8	6.5	14	[illegible]	141	30	9.9
5	6.0	6.2	6.0	6.0	5.0	4.8	7.0	[illegible]	137	133	31	9.4
6	6.0	6.5	6.0	6.0	5.0	5.0	7.8	22	243	120	31	9.1
7	6.0	6.4	6.0	6.0	5.0	5.0	9.4	[illegible]	283	56	32	9.3
8	6.0	6.4	6.0	6.0	5.0	5.0	9.0	[illegible]	251	42	[illegible]	8.8
9	6.0	6.0	6.0	6.0	5.0	5.0	9.8	[illegible]	317	40	29	8.8
10	6.0	6.4	6.0	6.0	5.0	5.0	[illegible]	[illegible]	324	38	27	8.5
11	6.0	6.6	6.0	6.0	5.0	5.0	11	[illegible]	307	66	26	9.1
12	6.0	5.9	6.0	6.0	5.0	5.0	[illegible]	[illegible]	271	36	[illegible]	9.7
13	6.0	5.8	6.0	6.0	5.0	5.0	13	[illegible]	254	34	25	8.6
14	6.0	6.0	6.0	6.0	5.0	5.0	[illegible]	[illegible]	191	81	25	9.0
15	6.0	6.0	6.0	6.0	5.0	5.0	14	46	195	71	24	8.7
16	6.0	6.0	6.0	6.0	5.0	5.0	15	58	198	56	25	8.2
17	6.0	6.0	6.0	6.0	5.0	5.0	[illegible]	61	221	62	26	7.8
18	6.0	6.0	6.0	6.0	5.0	5.0	[illegible]	56	265	[illegible]	25	7.6
19	6.0	6.0	6.0	6.0	5.0	5.0	[illegible]	71	281	[illegible]	23	7.6
20	6.0	6.0	6.0	6.0	5.0	5.0	19	53	283	50	23	7.6
21	7.5	6.0	6.0	5.8	5.0	5.0	17	42	281	47	23	7.6
22	6.5	6.0	6.0	5.6	5.0	5.0	16	35	184	44	22	7.9
23	6.0	6.0	6.0	5.4	5.0	5.0	15	41	265	42	21	7.7
24	6.0	6.0	6.0	5.2	5.0	5.0	14	38	254	42	20	7.6
25	6.0	6.0	6.0	5.0	5.0	5.0	13	42	244	41	20	7.6
26	6.9	6.0	6.0	5.0	5.0	5.0	14	46	235	40	20	7.6
27	6.8	6.0	6.0	5.0	5.0	5.0	14	54	219	41	19	7.6
28	6.5	6.0	6.0	5.0	5.0	5.0	14	65	226	38	19	7.6
29	8.0	6.0	6.0	5.0	5.0	5.0	16	89	240	41	18	7.6
30	9.1	6.0	6.0	5.0	---	5.0	19	104	194	40	12	7.6
31	8.1	---	5.0	5.0	---	5.0	---	113	---	40	11	---
TOTAL	197.9	187.0	186.0	177.0	145.0	154.0	365.2	1350	6985	2189	776	255.7
MEAN	6.38	6.23	6.00	5.71	5.00	4.97	12.2	43.5	233	70.6	25.0	8.52
MAX	9.1	8.0	6.0	6.0	5.0	5.0	19	113	324	175	40	11
MIN	6.0	5.8	6.0	5.0	5.0	4.8	5.4	18	62	38	11	7.6
AC-FT	393	371	369	351	288	305	724	2680	13850	4340	1540	507

CAL YR 1987 TOTAL 10622.2 MEAN 29.1 MAX 235 MIN 5.8 AC-FT 21070
WTR YR 1988 TOTAL 12967.8 MEAN 35.4 MAX 324 MIN 4.8 AC-FT 25720

09035800 DARLING CREEK NEAR LEAL, CO

LOCATION.--Lat 39°48'20", long 106°01'05", in NE¼SW¼ sec.9, T.3 S., R.77 W., Grand County, Hydrologic Unit 14010001, on left bank 0.6 mi upstream from mouth and 1.4 mi southeast of Leal.

DRAINAGE AREA.--8.21 mi².

PERIOD OF RECORD.--October 1965 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 9,090 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 14 to Apr. 15. Records good except for estimated daily discharges, which are poor. No diversion upstream from station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--23 years, 9.84 ft³/s; 7,130 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 241 ft³/s, June 30, 1984 gage height, 4.30 ft, from rating curve extended above 100 ft³/s; minimum daily, 1.0 ft³/s, Jan. 12, 1975.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 101 ft³/s at 1800 June 11, gage height, 3.63 ft; minimum daily, 1.8 ft³/s, Mar. 2-7.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.2	5.5	2.9	2.0	2.0	1.9	2.1	5.7	26	32	6.9	4.0
2	5.0	5.5	2.7	2.0	2.0	1.8	2.2	5.1	28	29	6.4	4.0
3	5.1	5.2	2.5	2.0	2.0	1.8	2.4	4.9	38	27	6.1	3.9
4	5.0	5.2	2.5	2.0	2.0	1.8	2.5	4.9	52	25	6.0	3.9
5	5.3	5.1	2.5	2.0	2.0	1.8	2.6	5.1	57	23	5.8	3.9
6	5.0	5.2	2.5	2.0	2.0	1.8	2.8	5.4	61	21	5.7	3.8
7	4.9	5.1	2.5	2.0	2.0	1.8	3.0	5.2	63	19	5.9	3.7
8	4.9	5.0	2.5	2.0	2.0	1.9	3.1	5.1	66	18	5.7	3.7
9	4.9	4.6	2.5	2.0	2.0	2.0	3.3	5.0	71	17	5.4	3.7
10	4.9	5.1	2.4	2.0	2.0	2.0	3.5	4.9	74	16	5.3	3.9
11	4.8	4.9	2.3	2.0	2.0	2.0	3.7	5.2	76	15	5.2	4.1
12	4.9	4.8	2.2	2.0	2.0	2.0	4.0	6.4	69	14	5.1	4.1
13	5.1	5.0	2.1	2.0	2.0	2.0	4.2	8.4	62	13	4.9	4.0
14	5.7	5.0	2.0	2.0	2.0	2.0	4.4	12	58	13	4.7	4.2
15	5.5	4.8	2.0	2.0	2.0	2.0	4.7	16	58	11	4.6	4.1
16	5.5	4.6	2.0	2.0	2.0	2.0	4.8	18	62	11	5.0	4.1
17	5.2	4.2	2.0	2.0	2.0	2.0	4.8	19	59	10	5.1	3.9
18	5.2	3.7	2.0	2.0	2.0	2.0	4.6	22	57	9.6	4.8	3.9
19	5.1	3.3	2.0	2.0	2.0	2.0	4.7	22	61	9.2	4.6	3.9
20	4.8	3.0	2.0	2.0	2.0	2.0	4.8	17	61	8.7	4.5	3.9
21	5.0	3.0	2.0	2.0	2.0	2.0	5.0	15	60	8.2	4.6	3.8
22	5.0	3.0	2.0	2.0	2.0	2.0	4.8	13	61	7.8	4.5	4.1
23	5.0	3.0	2.0	2.0	2.0	2.0	4.6	13	54	7.5	4.3	4.0
24	5.2	3.0	2.0	2.0	2.0	2.0	4.5	13	49	7.2	4.2	3.9
25	5.3	3.0	2.0	2.0	2.0	2.0	4.5	15	47	7.0	4.1	3.8
26	5.3	3.0	2.0	2.0	2.0	2.0	4.4	17	45	7.8	4.3	3.8
27	5.2	3.0	2.0	2.0	2.0	2.0	4.5	19	42	7.2	4.3	3.8
28	5.1	3.0	2.0	2.0	2.0	2.0	4.4	24	41	6.8	4.1	3.8
29	5.1	3.0	2.0	2.0	2.0	2.0	4.7	32	43	9.3	4.1	3.9
30	5.3	3.0	2.0	2.0	---	2.0	5.4	36	36	7.6	4.1	4.0
31	5.5	---	2.0	2.0	---	2.0	---	30	---	7.3	4.0	---
TOTAL	158.4	124.8	68.1	62.0	58.0	60.6	119.0	424.3	1637	425.2	154.3	117.6
MEAN	5.11	4.16	2.20	2.00	2.00	1.95	3.97	13.7	54.6	13.7	4.98	3.92
MAX	5.7	5.5	2.9	2.0	2.0	2.0	5.4	36	76	32	6.9	4.2
MIN	4.8	3.0	2.0	2.0	2.0	1.8	2.1	4.9	26	6.8	4.0	3.7
AC-FT	314	248	135	123	115	120	236	842	3250	843	306	233

CAL YR 1987 TOTAL 2827.9 MEAN 7.75 MAX 52 MIN 2.0 AC-FT 5610
WTR YR 1988 TOTAL 3409.3 MEAN 9.32 MAX 76 MIN 1.8 AC-FT 6760

09035880 SOUTH FORK WILLIAMS FORK BELOW OLD BALDY MOUNTAIN, NEAR LEAL, CO

LOCATION.--Lat 39°45'32", long 106°02'08", in Grand County, Hydrologic Unit 14010001, on right bank 5.3 mi northwest of Ptarmigan Pass, and 3.6 mi south of Leal.

DRAINAGE AREA.--21.8 mi².

PERIOD OF RECORD.--October 1985 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 9,330 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 10, and Nov. 20 to Apr. 7. Records good except for estimated daily discharges, which are poor. No diversions upstream from station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 285 ft³/s, June 19, 1986, gage height, 3.37 ft; maximum gage height, 3.39 ft, June 9, 1988; minimum daily discharge, 5.6 ft³/s, Feb. 12-19, 1986, Jan. 13-20, 1988.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 50 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
May 18	2230	104	2.07	June 9	2000	*275	*3.39
May 29	2100	152	2.50				

Minimum daily discharge, 5.6 ft³/s, Jan. 13-20.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.1	9.9	8.0	7.0	6.0	6.0	6.0	18	85	95	25	11
2	7.9	10	8.0	7.0	6.0	6.0	6.0	16	94	87	22	11
3	7.8	9.0	8.0	7.0	6.0	6.0	6.0	16	123	80	22	11
4	7.7	8.4	8.0	7.0	6.0	6.0	6.0	14	165	76	21	10
5	7.6	8.0	8.0	7.0	6.0	6.0	6.0	15	175	70	20	10
6	7.5	8.8	8.0	7.0	6.0	6.0	6.0	17	181	65	20	9.8
7	7.4	8.4	8.0	7.0	6.0	6.0	6.0	16	195	61	21	9.5
8	7.5	8.1	8.0	7.0	6.0	6.0	6.2	15	196	58	21	9.2
9	7.4	7.8	8.0	7.0	6.0	6.0	7.5	14	219	54	18	9.0
10	7.3	8.0	8.0	6.7	6.0	6.0	7.2	14	235	51	17	9.9
11	7.1	8.2	8.0	6.3	6.0	6.0	6.8	16	216	48	17	12
12	7.0	8.2	8.0	6.0	6.0	6.0	8.1	22	204	46	16	13
13	7.9	8.3	8.0	5.6	6.0	6.0	10	34	182	44	16	11
14	11	7.8	8.0	5.6	6.0	6.0	11	49	163	43	15	12
15	10	7.8	8.0	5.6	6.0	6.0	11	62	169	40	14	11
16	10	7.8	8.0	5.6	6.0	6.0	12	69	178	33	16	9.9
17	9.3	7.8	8.0	5.6	6.0	6.0	13	72	182	36	17	9.3
18	9.0	8.1	8.0	5.6	6.0	6.0	12	82	179	34	16	9.0
19	8.7	8.0	8.0	5.6	6.0	6.0	12	81	191	34	14	8.9
20	7.6	8.0	8.0	5.6	6.0	6.0	13	61	191	32	14	8.9
21	7.9	8.0	8.0	6.0	6.0	6.0	14	51	190	30	14	8.7
22	8.0	8.0	8.0	6.0	6.0	6.0	13	45	186	28	15	10
23	7.9	8.0	8.0	6.0	6.0	6.0	12	43	174	27	13	9.9
24	8.3	8.0	8.0	6.0	6.0	6.0	11	49	161	26	12	9.1
25	9.3	8.0	8.0	6.0	6.0	6.0	10	58	148	25	12	8.8
26	8.7	8.0	8.0	6.0	6.0	6.0	11	68	141	26	12	8.5
27	8.5	8.0	8.0	6.0	6.0	6.0	9.2	78	131	26	12	8.5
28	8.3	8.0	7.4	6.0	6.0	6.0	9.1	91	125	24	12	9.2
29	8.1	8.0	7.0	6.0	6.0	6.0	11	111	132	26	11	9.6
30	9.3	8.0	7.0	6.0	---	6.0	16	117	107	26	11	9.7
31	9.4	---	7.0	6.0	---	6.0	---	97	---	26	11	---
TOTAL	257.5	246.4	244.4	192.8	174.0	186.0	288.1	1511	5018	1382	497	297.4
MEAN	8.31	8.21	7.88	6.22	6.00	6.00	9.60	48.7	167	44.6	16.0	9.91
MAX	11	10	8.0	7.0	6.0	6.0	16	117	235	95	25	13
MIN	7.0	7.8	7.0	5.6	6.0	6.0	6.0	14	85	24	11	8.5
AC-FT	511	489	485	382	345	369	571	3000	9950	2740	986	590

CAL YR 1987 TOTAL 8368.6 MEAN 22.9 MAX 156 MIN 6.0 AC-FT 16600
WTR YR 1988 TOTAL 10294.6 MEAN 28.1 MAX 235 MIN 5.6 AC-FT 20420

09035900 SOUTH FORK WILLIAMS FORK NEAR LEAL, CO

LOCATION.--Lat 39°47'45", long 106°01'48", in NE¼ sec.17, T.3 S., R.77 W., Grand County, Hydrologic Unit 14010001, on left bank 800 ft upstream from highway bridge, 0.6 mi upstream from mouth, and 1.2 mi southeast of Leal.

DRAINAGE AREA.--27.3 mi².

PERIOD OF RECORD.--October 1965 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 8,950 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 9-13, and Nov. 15 to Apr. 28. Records good except for estimated daily discharges, which are poor. No diversion upstream from station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--23 years, 32.8 ft³/s; 23,760 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 464 ft³/s, June 15, 1978, gage height 3.37 ft; maximum gage height, 4.22 ft, Nov. 22, 1979 (backwater from ice); minimum daily discharge, 2.6 ft³/s, Mar. 6, 1967.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 200 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
June 19	1930	*375	*3.83	No other peak greater than base discharge.			

Minimum daily, 5.6 ft³/s, Mar. 2-7.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	13	8.0	7.0	6.0	5.8	6.4	22	118	98	29	13
2	10	14	8.0	7.0	6.0	5.6	6.8	19	131	88	25	13
3	10	12	8.0	7.0	6.0	5.6	7.2	26	176	80	23	13
4	9.9	11	8.0	7.0	6.0	5.6	7.5	18	237	76	22	12
5	9.9	10	8.0	7.0	6.0	5.6	7.8	19	217	70	21	12
6	9.8	12	8.0	7.0	6.0	5.6	8.0	21	213	65	21	12
7	9.5	11	8.0	7.0	6.0	5.6	8.5	19	218	61	22	11
8	9.6	11	8.0	7.0	6.0	6.0	9.0	19	213	56	23	11
9	9.4	11	8.0	7.0	6.0	6.0	9.5	18	241	51	20	11
10	9.4	11	8.0	7.0	6.0	6.0	10	18	248	50	19	12
11	9.3	11	8.0	7.0	6.0	6.0	11	19	227	49	19	14
12	9.1	11	8.0	7.0	6.0	6.0	11	25	220	51	19	15
13	10	11	8.0	7.0	6.0	6.0	12	39	200	52	18	13
14	15	10	8.0	7.0	6.0	6.0	13	57	170	52	17	14
15	14	9.4	8.0	7.0	6.0	6.0	14	77	181	48	16	14
16	14	8.7	8.0	7.0	6.0	6.0	15	89	192	45	17	13
17	12	8.2	8.0	7.0	6.0	6.0	16	95	200	43	19	12
18	12	8.0	8.0	7.0	6.0	6.0	17	114	261	40	18	12
19	12	8.0	8.0	7.0	6.0	6.0	18	124	302	38	16	11
20	9.8	8.0	8.0	7.0	6.0	6.0	19	82	244	36	15	12
21	11	8.0	8.0	6.8	6.0	6.0	20	63	212	34	16	11
22	10	8.0	8.0	6.6	6.0	6.0	18	54	210	32	16	12
23	10	8.0	8.0	6.4	6.0	6.0	16	49	189	31	15	13
24	11	8.0	8.0	6.2	6.0	6.0	14	56	175	30	14	12
25	13	8.0	8.0	6.0	6.0	6.0	12	69	161	29	13	11
26	11	8.0	7.9	6.0	6.0	6.0	10	84	152	30	13	11
27	11	8.0	7.6	6.0	6.0	6.0	10	99	139	30	14	10
28	11	8.0	7.4	6.0	6.0	6.0	10	123	129	28	14	11
29	11	8.0	7.1	6.0	6.0	6.0	13	158	142	29	13	11
30	12	8.0	7.0	6.0	---	6.0	18	171	113	30	13	12
31	12	---	7.0	6.0	---	6.0	---	139	---	29	13	---
TOTAL	339.7	289.3	244.0	208.0	174.0	183.4	367.7	1985	5831	1481	553	364
MEAN	11.0	9.64	7.87	6.71	6.00	5.92	12.3	64.0	194	47.8	17.8	12.1
MAX	15	14	8.0	7.0	6.0	6.0	20	171	302	98	29	15
MIN	9.1	8.0	7.0	6.0	6.0	5.6	6.4	18	113	28	13	10
AC-FT	674	574	484	413	345	364	729	3940	11570	2940	1100	722

CAL YR 1987 TOTAL 8904.8 MEAN 24.4 MAX 134 MIN 7.0 AC-FT 17660
WTR YR 1988 TOTAL 12020.1 MEAN 32.8 MAX 302 MIN 5.6 AC-FT 23840

09036000 WILLIAMS FORK NEAR LEAL, CO

LOCATION.--Lat 39°50'02", long 106°03'21", in sec.31, T.2 S., R.77 W., Grand County, Hydrologic Unit 14010001, on right bank at downstream side of bridge, 100 ft downstream from Kinney Creek, and 1.7 mi northwest of Leal.

DRAINAGE AREA.--89.5 mi².

PERIOD OF RECORD.--July 1933 to current year. Records since May 10, 1940, equivalent to earlier records if diversion to August P. Gumlick Tunnel is added to flow past station. Prior to October 1953, published as Williams River near Leal.

REVISED RECORDS.--WSP 1733: 1951. WSP 2124: Drainage area. WRD Colo. 1973: 1972.

GAGE.--Water-stage recorder. Elevation of gage is 8,790 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Aug. 16, 1953, at site 15 ft downstream at present datum.

REMARKS.--Estimated Daily discharges: Dec. 14 to Apr. 5. Records good except for estimated daily discharges, which are poor. Transmountain diversion upstream from station through August P. Gumlick Tunnel (see table below for figures of diversion). Diversions for irrigation of about 200 acres of hay meadows upstream from station and about 40 acres downstream from station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

COOPERATION.--Diversions, in acre-feet, through August P. Gumlick Tunnel, provided by Colorado Division of Water Resources.

AVERAGE DISCHARGE.--55 years, 104 ft³/s; 75,350 acre-ft/yr, including diversions to August P. Gumlick Tunnel.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,720 ft³/s, June 10, 1952, gage height, 4.23 ft; maximum gage height, 5.40 ft, June 29, 1971 (backwater from log); minimum daily discharge, 13 ft³/s, at times in 1939, 1963, 1964, and 1967.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 912 ft³/s at 2400 June 9, gage height, 3.70 ft; minimum daily, 16 ft³/s, Mar. 6-15.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	41	24	20	17	17	18	62	234	363	96	33
2	26	44	25	20	17	17	19	50	236	332	82	32
3	25	40	25	20	17	17	20	46	299	305	77	23
4	26	38	26	20	17	17	[illegible]	46	446	287	72	23
5	26	36	26	20	17	17	23	49	595	270	69	23
6	26	39	26	20	17	16	27	58	567	249	67	28
7	26	39	26	20	17	16	27	50	685	181	65	28
8	26	39	26	20	17	16	31	49	636	161	72	23
9	27	33	25	20	17	16	33	45	746	150	62	28
10	25	34	27	20	17	16	32	45	818	140	58	29
11	25	37	27	20	17	16	30	45	782	149	55	34
12	25	33	27	20	17	16	36	59	737	171	54	40
13	27	35	27	20	17	16	41	83	669	160	53	37
14	36	38	27	20	17	16	42	117	531	165	50	36
15	37	37	26	20	17	16	40	148	530	149	48	33
16	36	27	25	20	17	17	44	187	547	141	50	31
17	35	20	25	20	17	17	46	203	583	133	52	37
18	34	20	25	20	17	17	42	232	626	125	56	[illegible]
19	34	22	25	20	17	17	44	268	670	120	47	31
20	30	22	25	20	17	17	45	197	674	116	46	32
21	30	23	25	19	17	17	52	158	665	107	47	33
22	31	23	25	19	17	17	47	138	683	101	50	34
23	30	23	25	18	17	17	42	128	620	97	45	[illegible]
24	34	23	25	18	17	17	38	135	593	94	43	34
25	37	23	25	17	17	17	36	155	548	90	40	33
26	36	24	25	17	17	17	34	176	530	93	40	30
27	36	25	25	17	17	17	34	197	484	96	44	25
28	36	24	24	17	17	17	34	231	477	90	42	27
29	36	25	23	17	17	17	41	287	527	95	40	29
30	41	25	21	17	---	17	52	323	414	98	35	32
31	42	---	20	17	---	17	---	305	---	92	34	---
TOTAL	967	912	778	593	493	517	1072	4272	17151	4920	1701	937
MEAN	31.2	30.4	25.1	19.1	17.0	16.7	35.7	138	572	159	54.9	31.2
MAX	42	44	27	20	17	17	52	323	818	363	96	40
MIN	25	20	20	17	17	16	18	45	234	90	34	26
AC-FT	1920	1810	1540	1180	973	1030	2130	8470	34020	9760	3370	1860
a	210	192	168	86	74	47	147	1750	1480	561	37	294

CAL YR 1987 TOTAL 25998 MEAN 71.2 MAX 444 MIN 17 AC-FT 51570
WTR YR 1988 TOTAL 34313 MEAN 93.8 MAX 818 MIN 16 AC-FT 68060

a-Diversions, in acre-feet, through August P. Gumlick Tunnel, provided by Colorado Division of Water Resources.

09037500 WILLIAMS FORK NEAR PARSHALL, CO

LOCATION.--Lat 40°00'01", long 106°10'45", in SW¼SW¼ sec.31, T.1 N., R.78 W., Grand County, Hydrologic Unit 14010001, on left bank 150 ft downstream from bridge on State Highway 286, 3.7 mi downstream from Skylark Creek, 3.9 mi south of Parshall, and 4.2 mi upstream from Williams Fork Reservoir Dam.

DRAINAGE AREA.--184 mi².

PERIOD OF RECORD.--July 1904 to September 1924, June 1933 to current year. Records since May 10, 1940, equivalent to earlier records if diversion to August P. Gumlick Tunnel is added to flow past station. Published as "near (Hot) Sulphur Springs" 1904-12 and as Williams River near Parshall June 1933 to September 1958. Water-quality data available, April 1986 to September 1987.

REVISED RECORDS.--WSP 1243: 1918. WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 7,808.95 ft, (Denver Board of Water Commissioners Datum). See WSP 1733 for history of changes prior to Aug. 9, 1938. Aug. 10, 1938 to Aug. 19, 1983 gage located on right bank at present datum.

REMARKS.--Estimated daily discharges: Nov. 9 to Apr. 21, and Apr. 24-27. Records good except for estimated daily discharges, which are poor. Transmountain diversion upstream from station through August P. Gumlick Tunnel (station 09036000). Diversions upstream from station for irrigation of about 1,300 acres upstream from station, and about 2,500 acres downstream from station. About 150 acres upstream from station irrigated by diversions into the drainage area. Water-quality data available April 1986 to Sept. 1987.

AVERAGE DISCHARGE.--75 years, 137 ft³/s; 99,260 acre-ft/yr, including diversion to August P. Gumlick Tunnel.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 2,620 ft³/s, June 14, 1918, gage height, 6.05 ft, site and datum then in use, from rating curve extended above 1,400 ft³/s; minimum daily, 4.8 ft³/s, May 6, 8-10, 1972.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 968 ft³/s at 0430 June 11, gage height, 3.47 ft; minimum daily, 10 ft³/s, Aug. 25-27.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	45	27	30	30	28	54	123	386	302	18	24
2	35	47	27	30	30	28	54	103	329	260	17	40
3	35	47	27	30	30	28	54	89	344	215	17	52
4	34	44	27	30	30	28	54	91	454	191	16	50
5	34	40	27	30	30	28	54	91	622	171	14	49
6	34	41	30	30	30	28	60	107	534	147	13	47
7	35	45	30	30	30	28	60	93	711	101	13	45
8	35	44	30	30	30	28	60	89	658	72	15	43
9	36	34	30	30	30	28	60	81	731	51	13	41
10	35	34	30	30	30	28	60	79	840	31	12	41
11	35	34	35	30	30	33	76	76	816	30	11	47
12	35	33	35	30	30	33	76	97	753	53	11	60
13	37	33	35	30	30	33	76	139	690	41	11	53
14	44	33	35	30	30	33	76	218	496	48	11	55
15	48	33	35	30	30	33	76	276	456	33	11	54
16	45	30	35	30	30	37	80	357	465	26	12	49
17	43	29	35	30	30	37	90	385	504	23	13	43
18	43	28	35	30	30	37	98	414	539	22	13	43
19	41	26	35	30	30	37	110	548	589	20	11	42
20	37	26	35	30	30	37	115	458	603	19	11	42
21	36	26	35	30	28	43	130	365	582	18	11	41
22	39	26	35	30	28	43	121	314	632	18	12	43
23	40	26	35	30	28	43	105	285	555	17	11	41
24	41	26	35	30	28	43	100	299	507	17	11	39
25	47	26	35	30	28	43	96	321	459	16	10	37
26	44	26	35	30	28	48	84	360	459	16	10	36
27	41	26	35	30	28	48	70	397	432	17	10	35
28	40	26	35	30	28	48	65	427	413	17	15	35
29	40	26	35	30	28	48	77	463	498	17	24	37
30	43	26	35	30	---	48	97	529	375	18	26	37
31	47	---	35	30	---	48	---	473	---	17	25	---
TOTAL	1215	986	1020	930	852	1133	2388	8147	16432	2044	428	1301
MEAN	39.2	32.9	32.9	30.0	29.4	36.5	79.6	263	548	65.9	13.8	43.4
MAX	48	47	35	30	30	48	130	548	840	302	26	60
MIN	34	26	27	30	28	28	54	76	329	16	10	24
AC-FT	2410	1960	2020	1840	1690	2250	4740	16160	32590	4050	849	2580

CAL YR 1987 TOTAL 22588 MEAN 61.9 MAX 362 MIN 13 AC-FT 44800
WTR YR 1988 TOTAL 36876 MEAN 101 MAX 840 MIN 10 AC-FT 73140

09038000 WILLIAMS FORK RESERVOIR NEAR PARSHALL, CO

LOCATION.--Lat 40°02'06", long 106°12'17", in SE¼ sec.23, T.1 N., R.79 W., Grand County, Hydrologic Unit 14010001, at dam on Williams Fork, 2.1 mi upstream from mouth, and 2.2 mi southwest of Parshall.

DRAINAGE AREA.--230 mi².

PERIOD OF RECORD.--April 1939 to current year. Prior to October 1948, published in WSP 1313.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Non recording gage read once daily. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by city engineer of Denver); gage readings have been reduced to elevations above National Geodetic Vertical Datum of 1929.

REMARKS.--Reservoir is formed by concrete-arch dam completed in October 1939; storage began April 1939; dam was enlarged Dec. 5, 1956, to Apr. 22, 1959. Enlarged capacity, 96,820 acre-ft, between elevations 7.634 ft, invert of outlet, and 7,811 ft, top of radial gates on spillway. No dead storage. Figures given represent usable contents. Reservoir is used for power development and to store water to compensate for water diverted through August P. Gumlick Tunnel. Water is released during periods of low flow in Colorado River to supply decreed prior water rights. Records provided by Denver Board of Water Commissioners.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 97,130 acre-ft, July 9, 1962, elevation, 7,811.19 ft; no contents at times in 1958 (construction) and 1966 (drained for repairs).

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 95,820 acre-ft, July 3, elevation, 7,810.38 ft; minimum, 56,360 acre-ft, Apr. 6, elevation, 7,780.55 ft.

MONTHEND ELEVATION AND CONTENTS, AT 0800, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

Date	Elevation	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.	7,797.94	77,490	-
Oct. 31.	7,799.19	79,200	+1,710
Nov. 30.	7,794.98	73,550	-5,650
Dec. 31.	7,791.80	69,460	-4,090
CAL YR 1987			-860
Jan. 31.	7,788.48	65,380	-4,080
Feb. 29.	7,784.94	61,230	-4,150
Mar. 31.	7,781.10	56,950	-4,280
Apr. 30.	7,781.36	57,240	+290
May 31.	7,790.40	67,720	+10,480
June 30.	7,810.19	95,510	+27,790
July 31.	7,806.76	90,150	-5,360
Aug. 31.	7,800.15	80,520	-9,630
Sept. 30.	7,794.28	72,640	-7,880
WTR YR 1988			-4,850

09038500 WILLIAMS FORK BELOW WILLIAMS FORK RESERVOIR, CO

LOCATION.--Lat 40°02'07", long 106°12'17", in SE¼ sec.23, T.1 N., R.79 W., Grand County, Hydrologic Unit 14010001, on left bank 400 ft downstream from Williams Fork Reservoir, 2.1 mi upstream from mouth, and 2.1 mi southwest of Parshall.

DRAINAGE AREA.--230 mi².

PERIOD OF RECORD.--October 1948 to September 1954, August 1958 to current year. Monthly discharge only for some periods, published in WSP 1313. Prior to October 1958, published as Williams River below Williams Fork Reservoir. Water-quality data available, April 1986 to September 1987.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 7,615.0 ft, (Denver Board of Water Commissioners Datum). See WSP 1713 or 1733 for history of changes prior to Oct. 21, 1959.

REMARKS.--Estimated daily discharges: Sept. 23-30. Records good. Flow completely regulated by Williams Fork Reservoir (station 09038000). Transmountain diversion upstream from station through August P. Gumlick Tunnel (station 09035900). Diversions upstream from station for irrigation of about 3,200 acres upstream from station and about 100 acres downstream from station. About 450 acres upstream from station irrigated by diversion into the drainage area.

AVERAGE DISCHARGE.--29 years, 129 ft³/s; 93,460 acre-ft/yr, adjusted for storage in Williams Fork Reservoir.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,640 ft³/s, June 20, 1953, gage height, 8.50 ft, site and datum then in use, from rating curve extended above 1,500 ft³/s; no flow for part of Apr. 29, 1975.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 637 ft³/s at 1900 June 22, gage height, 3.29 ft; minimum daily, 18 ft³/s, Oct. 6-28.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	[illegible]	109	114	115	116	121	116	117	28	286	108	177
2	[illegible]	[illegible]	113	115	116	120	116	116	28	227	183	176
3	[illegible]	[illegible]	113	115	116	120	116	117	28	226	242	175
4	[illegible]	[illegible]	113	116	117	[illegible]	116	118	29	230	242	177
5	[illegible]	140	113	115	118	121	116	118	29	229	242	176
6	18	170	113	115	118	120	116	118	29	228	244	175
7	18	172	114	103	118	120	118	118	29	228	241	175
8	18	168	113	115	118	120	118	118	29	228	197	175
9	18	167	112	115	[illegible]	121	117	118	30	228	171	175
10	18	168	114	115	116	120	116	116	31	231	177	175
11	18	169	115	116	118	120	116	107	31	233	175	176
12	18	169	116	116	119	120	117	115	31	233	173	177
13	18	169	116	113	121	119	118	116	31	149	172	177
14	18	169	113	114	119	118	118	115	31	107	175	177
15	18	169	113	116	119	118	118	115	31	108	175	177
16	18	169	113	116	119	118	119	113	32	109	173	176
17	18	169	114	116	119	118	120	113	32	107	174	175
18	18	165	115	114	119	120	119	114	27	106	175	175
19	18	131	115	113	120	119	117	112	24	164	174	177
20	18	110	115	113	121	118	116	111	132	234	171	177
21	18	113	115	114	122	118	117	112	200	237	173	177
22	18	112	115	115	122	117	118	113	352	233	173	175
23	18	111	115	116	120	116	118	113	557	239	173	175
24	18	111	115	116	121	115	117	111	541	240	173	175
25	18	113	115	114	122	117	116	110	381	240	173	175
26	18	113	115	115	122	116	117	111	240	240	172	177
27	18	112	115	115	122	117	118	111	228	148	177	177
28	18	111	116	116	119	118	118	109	272	109	176	175
29	21	113	116	118	120	118	118	109	458	111	173	174
30	73	115	115	113	---	117	118	109	487	111	173	106
31	111	---	115	116	---	116	---	56	---	110	177	---
TOTAL	727	4139	3543	3558	3453	3674	3518	3470	4408	5914	5702	5206
MEAN	23.5	138	114	115	119	119	117	112	147	191	184	174
MAX	111	172	116	118	122	121	120	118	557	286	244	177
MIN	18	109	112	103	116	115	116	56	24	106	108	106
AC-FT	1440	8210	7030	7060	6850	7290	6980	6880	8740	11730	11310	10330

CAL YR 1987 TOTAL 32375 MEAN 88.7 MAX 187 MIN 15 AC-FT 64220
WTR YR 1988 TOTAL 47312 MEAN 129 MAX 557 MIN 18 AC-FT 93840

09039000 TROUBLESOME CREEK NEAR PEARMONT, CO

LOCATION.--Lat 40°13'03", long 106°18'45", in SE¼ sec.14, T.3 N., R.80 W., Grand County, Hydrologic Unit 14010001, on left bank 45 ft downstream from small tributary, 3 mi north of Pearmont, 4 mi downstream from Rabbit Ear Creek, 5.2 mi upstream from East Fork, and 12 mi northeast of Kremmling.

DRAINAGE AREA.--44.6 mi².

PERIOD OF RECORD.--October 1953 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 8,049 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 18, 19, 24, 25, Dec. 9, 10, and Dec. 20 to Apr. 8. Records good except for estimated daily discharges, which are poor. One diversion upstream from station for irrigation of about 250 acres downstream from station. Flow partly regulated during irrigation season by one reservoir, capacity, 1,070 acre-ft, upstream from station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--35 years, 30.8 ft³/s; 22,310 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 630 ft³/s, June 25, 1983, gage height, 2.81 ft; maximum gage height, 3.93 ft, Mar. 31, 1965 (backwater from ice); minimum daily discharge, 4.5 ft³/s, Dec. 20-24, 1976.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 245 ft³/s at 2200 May 18, gage height, 2.05 ft; minimum daily, 5.3 ft³/s, Dec. 2.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.5	13	5.4	12	13	14	13	35	143	47	16	15
2	7.5	14	5.3	13	13	14	13	31	126	43	15	15
3	7.5	13	5.6	13	13	14	13	29	127	41	15	14
4	7.5	13	6.7	13	13	14	13	29	149	43	15	14
5	7.6	12	8.8	13	13	14	13	30	172	47	14	15
6	7.5	13	11	13	13	13	13	35	177	47	15	15
7	7.5	13	12	13	13	13	13	36	171	45	15	[illegible]
8	7.2	12	11	13	13	13	13	35	161	42	15	[illegible]
9	7.2	11	12	13	13	13	13	33	152	44	14	[illegible]
10	8.8	12	12	13	13	13	15	34	143	49	14	[illegible]
11	11	12	12	13	14	13	18	34	133	49	14	35
12	11	13	12	13	14	13	20	42	123	49	13	36
13	12	12	13	13	14	13	23	62	113	47	14	32
14	15	12	14	13	14	13	25	101	100	47	13	29
15	14	12	13	13	14	13	27	127	87	47	13	27
16	13	13	12	13	14	13	27	146	76	40	14	27
17	12	13	12	13	14	13	28	174	70	22	14	26
18	12	14	12	13	14	13	28	210	68	19	14	24
19	12	15	12	13	14	13	30	225	65	16	13	23
20	12	13	12	13	14	13	29	173	61	14	13	22
21	12	13	12	13	14	13	29	135	58	13	14	20
22	12	13	12	13	14	13	28	107	59	14	13	22
23	12	12	12	13	14	13	24	87	62	14	14	17
24	12	12	12	13	14	13	23	83	62	14	15	15
25	14	12	12	13	14	13	23	98	62	14	15	13
26	13	12	12	13	14	13	22	109	59	14	15	13
27	12	11	12	13	14	13	24	125	53	14	15	13
28	12	8.2	12	13	14	13	25	151	48	14	16	13
29	12	5.8	12	13	14	13	28	174	51	14	17	13
30	13	5.5	12	13	---	13	33	195	51	15	17	13
31	13	---	12	13	---	13	---	164	---	15	14	---
TOTAL	336.8	359.5	345.8	402	396	408	646	3049	2982	953	448	637
MEAN	10.9	12.0	11.2	13.0	13.7	13.2	21.5	98.4	99.4	30.7	14.5	21.2
MAX	15	15	14	13	14	14	33	225	177	49	17	36
MIN	7.2	5.5	5.3	12	13	13	13	29	48	13	13	13
AC-FT	668	713	686	797	785	809	1280	6050	5910	1890	889	1260

CAL YR 1987 TOTAL 9044.0 MEAN 24.8 MAX 142 MIN 5.3 AC-FT 17940
WTR YR 1988 TOTAL 10963.1 MEAN 30.0 MAX 225 MIN 5.3 AC-FT 21750

09041500 MUDDY CREEK AT KREMMLING, CO

LOCATION.--Lat 40°03'37", long 106°23'48", in SW¼SE¼ sec.7, T.1 N., R.80 W., Grand County, Hydrologic Unit 14010001, on left bank 450 ft upstream from U.S. Highway 40 bridge at Kremmling and 2.8 mi upstream from mouth.

DRAINAGE AREA.--290 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August to October 1904, April to October 1905. Monthly discharge only in WSP 1313. April 1982 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 7,340 ft above National Geodetic Vertical Datum of 1929, from topographic map. Supplementary recorder on diversion ditch about 2,000 ft downstream from point of diversion.

REMARKS.--Estimated daily discharges: Oct. 1 to Mar. 10, Apr. 18-20, July 31 to Sept. 13, and Sept. 16-30. Records good except for estimated daily discharges, which are poor. Records include flow of diversion ditch.

AVERAGE DISCHARGE.--6 years, 124 ft^3/s; 89,840 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum combined discharge, 1,670 ft^3/s, May 16, 1984, gage height, 12.67 ft; minimum daily, 1.0 ft^3/s, Sept. 24, 25, 1905.

EXTREMES FOR CURRENT YEAR.--Maximum combined discharge, 879 ft^3/s at 2300 May 19, gage height, 8.62 ft; minimum daily, 6.1 ft^3/s, Sept. 15.

DISCHARGE, CUPIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.4	7.6	9.0	10.5	13	12	50	492	481	72	11	8.8
2	8.8	7.6	9.2	10.5	13	12.5	57	410	449	69	11	8.4
3	8.4	7.6	9.2	10.5	13	13	100	290	457	69	12	8.0
4	8.0	7.6	9.2	10.5	13	13	185	289	460	89	11	7.8
5	7.6	7.6	9.2	10.5	13	14	246	374	470	92	11	7.6
6	7.4	7.8	9.2	10.5	13	14.5	203	470	446	87	11	7.4
7	7.2	7.8	9.2	10.5	13	15	287	400	388	83	10	7.0
8	7.2	7.8	9.4	11	13	16	337	343	344	80	10	6.8
9	7.2	7.8	9.4	11	13	17	194	314	288	67	10	6.6
10	7.2	7.8	9.4	11	13	18	122	311	242	66	10	6.5
11	7.2	8.2	9.4	11	12	20	129	300	213	83	12	6.2
12	7.2	8.2	9.4	11	12	20	183	398	204	60	24	6.2
13	7.2	8.4	9.4	11	12	22	206	519	194	56	26	10
14	7.6	8.4	9.6	11	12	28	191	640	166	57	26	7.7
15	7.8	8.2	9.6	12	12	29	220	714	165	56	10	6.1
16	7.5	8.6	9.6	12	12	30	262	780	158	55	10	6.2
17	7.4	8.6	9.6	12	12	32	275	812	139	49	10	6.2
18	7.4	8.6	9.6	12	12	34	290	781	142	45	9.9	6.2
19	7.4	8.6	9.6	12	12	34	285	808	146	47	9.8	6.2
20	7.6	8.6	9.8	12	12	34	315	810	138	46	9.8	6.2
21	7.6	8.8	9.8	12	12	32	371	603	129	42	9.6	6.2
22	7.6	8.8	9.8	13	12	25	279	482	113	39	9.6	6.2
23	7.6	8.8	9.8	13	12	23	220	446	116	43	9.6	6.2
24	7.4	8.8	9.8	13	12	20	208	442	120	29	9.4	6.4
25	7.6	8.8	9.8	13	12	19	222	473	103	26	9.4	6.4
26	8.0	9.0	10	13	12	26	195	558	79	24	9.4	6.6
27	7.8	9.0	10	13	12	62	180	573	74	15	9.2	6.6
28	7.6	9.0	10	13	12	94	183	593	76	11	9.2	6.8
29	7.4	9.0	10	13	12	69	225	606	76	13	9.0	6.8
30	7.4	9.0	10	13	---	78	354	619	75	11	8.8	6.8
31	7.4	---	10	13	---	73	---	580	---	11	8.8	---
TOTAL	236.1	250.4	297.0	364.5	358	949.0	6574	16230	6651	1592	356.5	207.1
MEAN	7.62	8.35	9.58	11.8	12.3	30.6	219	524	222	51.4	11.5	6.90
MAX	9.4	9.0	10	13	13	94	371	812	481	92	26	10
MIN	7.2	7.6	9.0	10	12	12	50	289	74	11	8.8	6.1
AC-FT	468	497	589	723	710	1880	13040	32190	13190	3160	707	411

CAL YR 1987 TOTAL 23362.5 MEAN 64.0 MAX 567 MIN 7.2 AC-FT 46340
WTR YR 1988 TOTAL 34065.6 MEAN 93.1 MAX 812 MIN 6.1 AC-FT 67570

09041500 MUDDY CREEK AT KREMMLING, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--March 1985 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1986 to September 1987 (discontinued).
WATER TEMPERATURE: April 1986 to September 1987 (discontinued).

INSTRUMENTATION.--Water-quality monitor from April 1986 to September 1987.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum mean, 1,610 microsiemens, July 29, 1987; minimum mean, 212 microsiemens, May 22, 1986.
WATER TEMPERATURE: Maximum, 24.8°C, July 26, 1987; minimum, 0.0°C, on many days during winter.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	TUR-BID-ITY (FTU)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
OCT										
08...	1415	7.2	1320	8.2	10.0	21	9.0	620	140	65
JAN										
28...	0900	13	620	7.4	0.0	15	3.2	270	71	23
MAR										
31...	1645	42	1310	7.5	0.0	5.1	3.0	470	79	67
APR										
20...	1350	309	510	7.3	4.0	310	10.8	200	49	18
28...	0930	191	557	7.1	4.5	77	9.6	240	59	22
MAY										
10...	1400	329	334	7.8	8.0	120	9.0	150	41	11
16...	1230	774	225	7.1	9.0	350	8.2	96	27	6.9
27...	1050	488	263	--	9.0	120	8.5	110	31	8.3
JUN										
30...	1250	73	1060	7.8	18.5	34	5.9	530	140	43
AUG										
05...	1325	12	1410	8.5	20.0	33	7.2	700	160	73
SEP										
01...	1130	8.8	1170	8.4	16.0	23	7.6	510	110	56
23...	1230	6.2	895	8.5	12.0	22	7.4	410	92	44

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
OCT										
08...	76	1	6.1	172	580	8.8	0.40	5.1	1030	985
JAN										
28...	32	0.9	2.2	174	160	3.8	0.30	12	420	409
MAR										
31...	99	2	9.2	141	600	12	0.20	8.4	1030	959
APR										
20...	24	0.8	3.3	115	140	3.5	0.20	7.3	331	314
28...	28	0.8	2.4	130	170	3.9	0.20	9.5	394	373
MAY										
10...	13	0.5	1.8	103	75	3.5	0.20	9.1	223	216
16...	8.0	0.4	1.7	75	44	1.3	0.30	8.8	139	144
27...	8.7	0.4	1.3	67	57	1.9	0.30	8.7	171	157
JUN										
30...	33	0.6	2.8	207	380	2.6	0.40	11	745	737
AUG										
05...	60	1	3.5	196	560	3.9	0.40	6.9	752	985
SEP										
01...	45	0.9	3.0	164	450	4.1	0.20	5.1	801	772
23...	42	0.9	2.6	139	350	3.7	0.20	5.8	638	625

09041500 MUDDY CREEK AT KREMMLING, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)
OCT									
08...	1.40	20.0	--	--	<0.10	--	0.03	--	0.97
JAN									
28...	0.57	14.7	--	--	0.20	--	0.05	--	0.35
MAR									
31...	1.40	117	--	--	0.50	--	0.38	--	1.4
APR									
20...	0.45	276	--	--	0.20	--	0.16	--	0.64
28...	0.54	203	--	--	0.20	--	0.06	--	0.24
MAY									
10...	0.30	195	--	--	0.10	--	0.07	--	0.53
16...	0.19	290	1310	<0.01	0.10	0.13	0.07	0.05	0.23
27...	0.23	225	--	--	<0.10	--	0.03	--	0.17
JUN									
30...	1.01	147	85	--	--	--	--	--	--
AUG									
05...	1.04	25.3	--	--	<0.10	--	0.06	--	0.54
SEP									
01...	1.09	19.0	--	--	<0.10	--	0.02	--	0.38
23...	0.97	10.7	36	--	<0.10	--	<0.01	---	--

DATE	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N)	PHOS- PHOROUS TOTAL (MG/L AS P)	PHOS- PHOROUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)	PHOS- PHOROUS ORTHO, DIS- SOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)
OCT									
08...	--	1.0	--	0.04	--	0.01	--	--	--
JAN									
28...	--	0.4	--	0.03	--	<0.01	--	--	--
MAR									
31...	--	1.8	--	0.15	--	0.05	--	19	16
APR									
20...	--	0.8	--	0.48	--	0.03	--	--	--
28...	--	0.3	--	0.06	--	0.03	--	--	--
MAY									
10...	--	0.6	--	0.04	--	0.04	--	--	--
16...	0.15	0.3	0.2	0.06	0.02	0.04	<0.01	17	7.4
27...	--	0.2	--	0.03	--	0.02	--	--	--
JUN									
30...	--	0.4	--	0.04	--	--	--	9.1	8.3
AUG									
05...	--	0.6	--	0.05	--	<0.01	--	--	--
SEP									
01...	--	0.4	--	0.04	--	<0.01	--	--	--
23...	--	0.4	0.4	0.02	0.02	<0.01	--	7.3	6.0

DATE	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE)	BORON, DIS- SOLVED (UG/L AS B)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV- ERABLE (UG/L AS CO)
OCT												
08...	--	--	--	--	--	--	--	--	--	--	--	--
JAN												
28...	--	--	--	--	--	--	--	--	--	--	--	--
MAR												
31...	--	--	--	--	--	--	--	--	--	--	--	--
APR												
20...	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--
MAY												
10...	--	--	--	--	--	--	--	--	--	--	--	--
16...	15000	4	1	200	31	<10	20	<1	1	22	<1	5
27...	--	--	--	--	--	--	--	--	--	--	--	--
JUN												
30...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
05...	--	--	--	--	--	--	--	--	--	--	--	--
SEP												
01...	--	--	--	--	--	----	--	--	--	--	--	--
23...	1600	1	1	<100	58	<10	90	<1	<1	5	<1	1

09041500 MUDDY CREEK AT KREMMLING, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LITHIUM TOTAL RECOV-ERABLE (UG/L AS LI)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)
OCT											
08...	--	--	--	11	--	--	--	--	--	--	--
JAN											
28...	--	--	--	16	--	--	--	--	--	--	--
MAR											
31...	--	--	--	--	--	--	--	--	--	--	--
APR											
20...	--	--	--	34	--	--	--	--	--	--	--
28...	--	--	--	62	--	--	--	--	--	--	--
MAY											
10...	--	--	--	72	--	--	--	--	--	--	--
16...	30	4	26000	64	30	20	<5	590	22	<0.1	<0.1
27...	--	--	--	--	--	--	--	--	--	--	--
JUN											
30...	--	--	--	18	--	--	--	--	--	--	--
AUG											
05...	--	--	--	4	--	--	--	--	--	--	--
SEP											
01...	--	--	--	15	--	--	--	--	--	--	--
23...	4	3	1400	15	50	<5	<5	90	50	<0.1	<0.1

DATE	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
OCT											
08...	--	--	--	--	--	--	--	--	--	--	--
JAN											
28...	--	--	--	--	--	--	--	--	--	--	--
MAR											
31...	--	--	--	--	--	--	--	--	--	--	--
APR											
20...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--
MAY											
10...	--	--	--	--	--	--	--	--	--	--	--
16...	4	2	37	4	<1	1	<1	<1.0	230	160	7
27...	--	--	--	--	--	--	--	--	--	--	--
JUN											
30...	--	--	--	--	--	--	--	--	--	--	--
AUG											
05...	--	--	--	--	--	--	--	--	--	--	--
SEP											
01...	--	--	--	--	--	--	--	--	--	--	--
23...	3	1	4	5	3	3	<1	<1.0	930	20	12

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT					
08...	1415	7.2	126	2.4	86
JAN					
28...	0900	13	65	2.3	93
MAR					
31...	1645	42	62	7.0	81
APR					
20...	1350	309	1390	1160	92
28...	0930	191	298	154	89
MAY					
10...	1400	329	470	418	82
16...	1230	774	1540	3220	78
27...	1050	488	453	597	80
JUN					
30...	1250	73	140	28	86
AUG					
05...	1325	12	94	3.0	89
SEP					
01...	1130	8.8	75	1.8	90
23...	1230	6.2	50	0.84	84

09041900 MONTE CRISTO DIVERSION NEAR HOOSIER PASS, CO

LOCATION.--Lat 39°22'51", long 106°04'15", in NE¼SE¼ sec.2, T.8 S., R.78W., Summit County, Hydrologic Unit 14010002, on left bank at entrance to Hoosier Pass tunnel, 1,800 ft downstream from diversion point, 1.4 mi northwest of Hoosier Pass, and 7 mi southwest of Breckenridge.

PERIOD OF RECORD.--October 1957 to current year.

GAGE.--Water-stage recorder and Parshall flume. Elevation of gage is 10,986 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records good. This is a transmountain diversion from Monte Cristo Creek in Blue River basin through Hoosier Pass tunnel to South Platte River basin from which it is again diverted to South Catamount Creek in the Arkansas River basin. Water is for municipal use by city of Colorado Springs. Diversion point is in SW¼NE¼ sec.2, T.8 S., R.78 W. The entire flow is regulated by diversion gates.

COOPERATION.--Gage-height record collected in cooperation with city of Colorado Springs.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 56 ft³/s, Aug. 25, 1988; no flow for most of each year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	2.9	3.4	23	.00	31
2	.00	.00	.00	.00	.00	.00	.00	2.1	3.5	22	.00	31
3	.00	.00	.00	.00	.00	.00	.00	1.8	5.7	20	.00	30
4	.00	.00	.00	.00	.00	.00	.00	2.3	8.1	22	.00	30
5	.00	.00	.00	.00	.00	.00	.00	3.2	9.3	21	1.6	30
6	.00	.00	.00	.00	.00	.00	.00	3.2	9.5	20	16	36
7	.00	.00	.00	.00	.00	.00	.00	2.4	9.1	20	.00	35
8	.00	.00	.00	.00	.00	.00	.00	1.8	8.9	17	.00	34
9	.00	.00	.00	.00	.00	.00	.00	1.9	9.3	14	.00	33
10	.00	.00	.00	.00	.00	.00	.00	2.1	9.7	13	.00	33
11	.00	.00	.00	.00	.00	.00	.00	2.4	7.7	12	.00	32
12	.00	.00	.00	.00	.00	.00	.00	4.1	6.1	11	.00	32
13	.00	.00	.00	.00	.00	.00	.00	6.1	5.4	11	.00	30
14	.00	.00	.00	.00	.00	.00	.00	7.1	4.2	13	.00	29
15	.00	.00	.00	.00	.00	.00	.00	7.1	4.0	11	.00	28
16	.00	.00	.00	.00	.00	.00	.00	7.5	4.0	9.3	.00	22
17	.00	.00	.00	.00	.00	.00	.00	7.9	3.9	8.7	1.8	15
18	.00	.00	.00	.00	.00	.00	.00	7.7	4.0	8.5	.35	11
19	.00	.00	.00	.00	.00	.00	.00	7.1	4.9	7.9	.00	3.7
20	.00	.00	.00	.00	.00	.00	.00	5.1	5.7	6.9	.00	3.4
21	.00	.00	.00	.00	.00	.00	.00	3.4	7.4	6.5	.00	3.4
22	.00	.00	.00	.00	.00	.00	.00	3.4	10	5.7	.00	3.4
23	.00	.00	.00	.00	.00	.00	.00	2.7	6.9	5.5	.00	3.3
24	.00	.00	.00	.00	.00	.00	.00	3.8	5.7	5.2	18	3.1
25	.00	.00	.00	.00	.00	.00	.00	6.1	5.2	5.1	56	3.1
26	.00	.00	.00	.00	.00	.00	1.7	6.9	5.5	4.0	52	3.1
27	.00	.00	.00	.00	.00	.00	1.6	7.9	5.4	.00	52	3.1
28	.00	.00	.00	.00	.00	.00	1.6	8.1	5.1	.00	50	12
29	.00	.00	.00	.00	.00	.00	1.9	7.7	5.3	.00	17	29
30	.00	.00	.00	.00	---	.00	2.9	7.3	18	.00	16	27
31	.00	---	.00	.00	---	.00	---	4.8	---	.00	17	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	9.70	147.9	200.9	323.30	297.75	619.6
MEAN	.00	.00	.00	.00	.00	.00	.32	4.77	6.70	10.4	9.60	20.7
MAX	.00	.00	.00	.00	.00	.00	2.9	8.1	18	23	56	36
MIN	.00	.00	.00	.00	.00	.00	.00	1.8	3.4	.00	.00	3.1
AC-FT	.0	.0	.0	.0	.0	.0	19	293	398	641	591	1230

CAL YR 1987 TOTAL 1355.85 MEAN 3.71 MAX 43 MIN .00 AC-FT 2690
WTR YR 1988 TOTAL 1599.15 MEAN 4.37 MAX 56 MIN .00 AC-FT 3170

09044300 BEMROSE-HOOSIER DIVERSION NEAR HOOSIER PASS, CO

LOCATION.--Lat 39°22'50", long 106°04'13", in NE¼SE¼ sec.2, T.8 S., R.78W., Summit County, Hydrologic Unit 14010002, on right bank at entrance to Hoosier Pass tunnel, 1.4 mi northwest of Hoosier Pass, 1.6 mi downstream from diversion point on Bemrose Creek, and 7 mi southwest of Breckenridge.

PERIOD OF RECORD.--October 1957 to current year.

GAGE.--Water-stage recorder and Parshall flume. Elevation of gage is 10,986 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: May 7-9. Records good. This is a transmountain diversion from Bemrose and Hoosier Creeks in Blue River basin through Hoosier Pass tunnel to South Platte River basin from which it is again diverted to South Catamount Creek in the Arkansas River basin. Water is for municipal use by city of Colorado Springs. Diversion points are in SW¼SW¼ sec.6, T.8 S., R.77 W., and in sec.12, T.8 S., R.78 W. The entire flow is regulated by diversion gates.

COOPERATION.--Gage-height record collected in cooperation with city of Colorado Springs.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 44 ft³/s, June 21, 1965; no flow for most of each year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	2.1	6.1	12	3.0	.00
2	.00	.00	.00	.00	.00	.00	.00	1.5	6.7	11	2.5	.00
3	.00	.00	.00	.00	.00	.00	.00	1.5	9.9	9.3	2.3	.00
4	.00	.00	.00	.00	.00	.00	.00	1.6	13	8.6	2.2	.00
5	.00	.00	.00	.00	.00	.00	.00	2.3	15	7.8	2.5	.00
6	.00	.00	.00	.00	.00	.00	.00	2.2	17	7.4	3.3	.00
7	.00	.00	.00	.00	.00	.00	.00	2.2	18	6.7	2.6	.00
8	.00	.00	.00	.00	.00	.00	.00	2.3	19	5.9	2.1	.00
9	.00	.00	.00	.00	.00	.00	.00	2.5	20	5.4	2.3	.00
10	.00	.00	.00	.00	.00	.00	.00	2.1	23	5.3	2.2	.00
11	.00	.00	.00	.00	.00	.00	.00	2.5	21	5.9	2.3	.00
12	.00	.00	.00	.00	.00	.00	.00	3.6	19	7.2	2.1	.00
13	.00	.00	.00	.00	.00	.00	.00	5.3	17	7.0	2.1	.00
14	.00	.00	.00	.00	.00	.00	.00	5.5	14	5.2	2.1	.00
15	.00	.00	.00	.00	.00	.00	.00	6.3	14	6.2	2.1	.00
16	.00	.00	.00	.00	.00	.00	.00	7.3	15	6.2	2.7	.00
17	.00	.00	.00	.00	.00	.00	.00	6.5	14	5.6	2.7	.00
18	.00	.00	.00	.00	.00	.00	.00	6.7	14	5.4	2.2	.00
19	.00	.00	.00	.00	.00	.00	.00	5.4	16	5.4	2.1	.00
20	.00	.00	.00	.00	.00	.00	.00	4.2	21	5.3	2.2	.00
21	.00	.00	.00	.00	.00	.00	.00	3.7	18	4.7	2.3	.00
22	.00	.00	.00	.00	.00	.00	.00	3.3	16	4.5	2.1	.00
23	.00	.00	.00	.00	.00	.00	.00	3.5	21	4.1	2.1	.00
24	.00	.00	.00	.00	.00	.00	.00	4.5	23	3.8	2.1	.00
25	.00	.00	.00	.00	.00	.00	.00	5.2	19	3.7	2.0	.00
26	.00	.00	.00	.00	.00	.00	.00	5.9	21	3.5	2.5	.00
27	.00	.00	.00	.00	.00	.00	.00	6.7	18	2.7	2.0	.00
28	.00	.00	.00	.00	.00	.00	.00	6.9	16	3.3	1.9	.00
29	.00	.00	.00	.00	.00	.00	.00	8.2	17	2.7	1.9	.00
30	.00	.00	.00	.00	---	.00	.91	9.2	14	2.9	1.9	.00
31	.00	---	.00	.00	---	.00	---	5.7	---	3.1	.77	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.91	136.7	494.7	179.0	68.37	0.00
MEAN	.00	.00	.00	.00	.00	.00	.030	4.41	16.5	5.77	2.21	.00
MAX	.00	.00	.00	.00	.00	.00	.91	9.2	23	12	3.3	.00
MIN	.00	.00	.00	.00	.00	.00	.00	1.5	6.1	2.7	.77	.00
AC-FT	.0	.0	.0	.0	.0	.0	1.8	271	981	355	137	.0

CAL YR 1987 TOTAL 856.64 MEAN 2.35 MAX 28 MIN .00 AC-FT 1700
WTR YR 1988 TOTAL 880.18 MEAN 2.40 MAX 23 MIN .00 AC-FT 1750

09044800 MCCULLOUGH-SPRUCE-CRYSTAL DIVERSION NEAR HOOSIER PASS, CO

LOCATION.--Lat 39°22'51", long 106°04'14", in NE¼SE¼ sec.2, T.8 S., R.78 W., Summit County, Hydrologic Unit 14010002, on left bank at entrance to Hoosier Pass tunnel, 1.4 mi northwest of Hoosier Pass, 1.6 mi downstream from diversion point on McCullough Gulch, and 7 mi southwest of Breckenridge.

PERIOD OF RECORD.--October 1957 to current year. Prior to October 1961, Published as McCullough diversion near Hoosier Pass.

GAGE.--Water-stage recorder and Parshall flume. Elevation of gage is 10,980 ft, above National Geodetic Vertical datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records good. This is a transmountain diversion from McCullough Gulch and Spruce and Crystal Creeks in Blue River basin through Hoosier Pass tunnel to South Platte River basin from which it is again diverted to South Catamount Creek in the Arkansas River basin. Water is for municipal use by city of Colorado Springs. Diversion points are in secs.14, 23, and 26, T.7 S., R.78 W. The entire flow is regulated by diversion gates.

COOPERATION.--Gage-height record collected in cooperation with city of Colorado Springs.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 123 ft³/s, June 20, 1968, June 19, 1983; no flow for part of each year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	24	23	.20	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	31	21	.05	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	42	20	.04	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	68	15	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	79	.45	.74	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	73	3.8	8.0	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	83	4.6	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	84	1.7	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	93	4.6	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	98	11	.00	.00
11	.00	.00	.00	.00	.00	.00	.00	.15	76	10	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	4.2	54	11	.03	.00
13	.00	.00	.00	.00	.00	.00	.00	14	56	14	.07	.00
14	.00	.00	.00	.00	.00	.00	.00	12	36	19	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	21	43	17	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	24	47	15	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	25	49	14	.00	.00
18	.00	.00	.00	.00	.00	.00	.00	21	54	15	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	19	81	15	.00	.00
20	.00	.00	.00	.00	.00	.00	.00	23	95	14	.00	.00
21	.00	.00	.00	.00	.00	.00	.00	15	95	13	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	13	105	12	.00	.00
23	.00	.00	.00	.00	.00	.00	.00	10	95	12	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	10	83	11	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	14	55	11	.00	.00
26	.00	.00	.00	.00	.00	.00	.00	16	95	9.3	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	21	83	.50	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	40	66	.15	.00	.00
29	.00	.00	.00	.00	.00	.00	.00	51	60	.15	.00	.00
30	.00	.00	.00	.00	---	.00	.00	44	42	.15	.00	.00
31	.00	---	.00	.00	---	.00	---	37	---	.15	.00	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	459.35	2062	318.55	9.33	0.00
MEAN	.00	.00	.00	.00	.00	.00	.00	14.8	68.7	10.3	.30	.00
MAX	.00	.00	.00	.00	.00	.00	.00	51	105	23	8.0	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	23	.15	.00	.00
AC-FT	.0	.0	.0	.0	.0	.0	.0	911	4090	632	19	.0

CAL YR 1987 TOTAL 1696.19 MEAN 4.65 MAX 76 MIN .00 AC-FT 3360
WTR YR 1988 TOTAL 2849.23 MEAN 7.78 MAX 105 MIN .00 AC-FT 5650

09046490 BLUE RIVER AT BLUE RIVER, CO

LOCATION.--Lat 39°27'21", long 106°01'52", in NE¼SE¼ sec.7, T.7 S, R.77 W., Summit County, Hydrologic Unit 14010002 on left bank, 350 ft downstream from spillway of Goose Pasture Tarn Dam, 2.0 mi southeast of Breckenridge.

DRAINAGE AREA.--22.6 mi².

PERIOD OF RECORD.--October 1983 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 9,385 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records good. Transmountain diversions upstream from station by Boreas Pass ditch and Hoosier Pass tunnel. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--5 years, 39.2 ft³/s; 28,400 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 506 ft³/s July 1, 1984, gage height, 2.84 ft, minimum daily, 4.8 ft³/s, Mar. 23, 1986.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 121 ft³/s, June 9, at 2300, gage height, 1.81 ft, minimum daily, 5.7 ft³/s, Mar. 14.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	14	11	9.3	7.5	6.6	7.4	26	69	101	[illegible]	[illegible]
2	15	14	12	9.5	7.2	6.7	7.4	21	[illegible]	96	[illegible]	[illegible]
3	14	14	[illegible]	9.9	7.6	6.4	[illegible]	13	79	91	47	[illegible]
4	15	[illegible]	12	9.8	6.9	6.5	7.8	20	91	90	43	[illegible]
5	14	[illegible]	[illegible]	9.7	7.8	6.3	8.3	[illegible]	[illegible]	[illegible]	40	27
6	[illegible]	[illegible]	[illegible]	9.9	6.9	5.8	8.7	[illegible]	107	96	113	[illegible]
7	[illegible]	[illegible]	[illegible]	[illegible]	6.9	5.8	[illegible]	[illegible]	109	93	[illegible]	[illegible]
8	[illegible]	[illegible]	[illegible]	9.2	6.9	[illegible]	[illegible]	[illegible]	[illegible]	87	[illegible]	[illegible]
9	[illegible]	[illegible]	[illegible]	9.3	6.6	[illegible]	[illegible]	[illegible]	[illegible]	79	[illegible]	[illegible]
10	13	[illegible]	11	9.9	7.9	6.3	9.8	[illegible]	117	67	48	[illegible]
11	[illegible]	[illegible]	[illegible]	9.7	7.0	[illegible]	10	[illegible]	115	62	[illegible]	[illegible]
12	13	12	12	10	6.6	5.9	12	27	106	[illegible]	44	[illegible]
13	[illegible]	12	12	[illegible]	6.4	6.1	14	35	93	52	42	[illegible]
14	16	12	12	9.5	6.8	5.7	16	45	89	44	[illegible]	[illegible]
15	15	12	11	9.1	[illegible]	[illegible]	[illegible]	[illegible]	85	39	34	27
16	15	13	12	[illegible]	[illegible]	[illegible]	18	[illegible]	77	37	35	26
17	14	[illegible]	12	[illegible]	[illegible]	[illegible]	19	[illegible]	[illegible]	[illegible]	61	[illegible]
18	[illegible]	12	11	[illegible]	6.7	7.2	[illegible]	61	72	34	58	[illegible]
19	[illegible]	12	11	[illegible]	6.5	6.1	18	[illegible]	77	32	47	[illegible]
20	[illegible]	12	11	[illegible]	6.5	6.2	[illegible]	59	81	30	43	23
21	12	[illegible]	11	[illegible]	[illegible]	[illegible]	21	48	78	28	46	22
22	[illegible]	12	11	[illegible]	5.5	[illegible]	15	[illegible]	111	25	[illegible]	[illegible]
23	12	12	11	[illegible]	[illegible]	[illegible]	17	[illegible]	[illegible]	[illegible]	47	[illegible]
24	13	[illegible]	11	7.2	6.2	[illegible]	16	[illegible]	76	24	41	21
25	14	12	11	[illegible]	6.3	7.6	15	47	72	[illegible]	[illegible]	20
26	[illegible]	12	[illegible]	7.7	6.3	[illegible]	15	[illegible]	74	23	35	[illegible]
27	13	12	11	7.6	6.4	7.4	14	59	[illegible]	31	36	13
28	13	11	10	7.9	6.5	8.1	15	68	79	33	[illegible]	[illegible]
29	13	12	9.8	7.7	6.5	7.4	17	97	[illegible]	47	[illegible]	[illegible]
30	14	11	9.8	8.1	---	7.6	21	96	[illegible]	[illegible]	[illegible]	[illegible]
31	15	---	9.7	7.6	---	7.6	---	77	---	45	29	---
TOTAL	425	373	350.3	275.2	195.2	204.1	414.4	1364	2648	1668	1488	[illegible]
MEAN	13.7	12.4	11.3	8.88	6.73	6.58	13.8	44.0	88.3	53.8	48.0	[illegible]
MAX	16	14	12	10	7.9	8.1	21	89	117	101	113	[illegible]
MIN	12	11	9.7	7.3	6.2	5.7	7.4	18	69	23	29	[illegible]
AC-FT	843	740	695	546	387	405	822	2710	5250	3310	2950	[illegible]

CAL YR 1987 TOTAL 10744.8 MEAN 29.4 MAX 165 MIN 4.8 AC-FT 21310
WTR YR 1988 TOTAL 10134.2 MEAN 27.7 MAX 117 MIN 5.7 AC-FT 20100

09046600 BLUE RIVER NEAR DILLON, CO

LOCATION.--Lat 39°32'55", long 106°02'19", in NW¼NE¼ sec.7, T.6 S., R.77 W., Summit County, Hydrologic Unit [illegible], on right bank 0.3 mi downstream from Swan River and 5.5 mi south of Dillon.

DRAINAGE AREA.--[illegible] mi².

PERIOD OF RECORD.--October 1957 to current year.

REVISED RECORDS.--WSP [illegible]: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 9,120 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Mar. 6-8. Records good. Transmountain diversions upstream from station by [illegible] ditch and Hoosier Pass tunnel (see elsewhere in this report). Several observations of [illegible] and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--[illegible] years, [illegible] ft³/s; [illegible] acre-ft/yr, adjusted for diversions to Hoosier Pass tunnel.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, [illegible] ft³/s, June [illegible], gage height, 5.33 ft, from rating curve extended above [illegible] ft³/s; minimum daily, [illegible] ft³/s, Mar. [illegible], 1961, Feb. 24-26, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, [illegible] ft³/s at [illegible] June [illegible], gage height, [illegible] ft; minimum daily, [illegible].

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER [illegible] TO SEPTEMBER [illegible]
MEAN VALUES

[illegible]	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
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[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
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[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
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[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
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[illegible]	[illegible]	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
---	[illegible]	---	[illegible]	---	[illegible]	---	[illegible]	[illegible]	---
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[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

[illegible]
[illegible]

09047500 SNAKE RIVER NEAR MONTEZUMA, CO

LOCATION.--Lat 39°36'20", long 105°56'33", in NW¼ sec.13, T.5 S., R.76 W. (projected), Summit County, Hydrologic Unit 14010002, on right bank 200 ft downstream from North Fork and 4.5 mi northwest of Montezuma.

DRAINAGE AREA.--57.7 mi².

PERIOD OF RECORD.--July 1942 to September 1946, October 1951 to current year.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 9,[illegible] ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Oct. 14, 1943, nonrecording gage at present site and datum.

REMARKS.--Estimated daily discharges: Oct. [illegible] to Apr. [illegible]. Records good except for estimated daily discharges, which are poor. Small diversions upstream from station for irrigation and domestic use. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--[illegible] years, [illegible] ft³/s; [illegible] acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, [illegible] ft³/s, June [illegible], gage height, [illegible] ft; maximum gage height, [illegible] ft, June [illegible]; minimum discharge not determined.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of [illegible] ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
June [illegible]	[illegible]	* [illegible]	* [illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Minimum daily, [illegible] ft³/s, [illegible].

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR [illegible]
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
9	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
12	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
13	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
14	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
15	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
16	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
17	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
18	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
19	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
20	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
21	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
22	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
23	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
24	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
25	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
26	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
27	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
28	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
29	[illegible]	[illegible]	[illegible]	[illegible]	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
30	[illegible]	[illegible]	[illegible]	[illegible]	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
31	[illegible]	---	[illegible]	[illegible]	---	[illegible]	---	[illegible]	---	[illegible]	[illegible]	---
TOTAL	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MEAN	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MAX	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MIN	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
AC-FT	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

CAL YR [illegible] TOTAL [illegible] MEAN [illegible] MAX [illegible] MIN [illegible] AC-FT [illegible]
WTR YR [illegible] TOTAL [illegible] MEAN [illegible] MAX [illegible] MIN [illegible] AC-FT [illegible]

09047700 KEYSTONE GULCH NEAR DILLON, CO

LOCATION.--Lat 39°35'40", long 105°58'19", in NE¼NE¼ sec.26, T.5 S., R.77 W., Summit County, Hydrologic Unit [illegible], on right bank 0.7 mi upstream from mouth and 4.7 mi southeast of Dillon.

DRAINAGE AREA.--[illegible] mi².

PERIOD OF RECORD.--October 1957 to current year.

REVISED RECORDS.--[illegible]: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is [illegible] ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. [illegible] to Apr. [illegible]. Records good except for estimated daily discharges, which are poor. No known diversion upstream from station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--[illegible] years, [illegible] ft³/s; [illegible] acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, [illegible] ft³/s, June [illegible], gage height, [illegible] ft, from rating curve extended above [illegible] ft³/s; minimum not determined.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of [illegible] ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
[illegible]	[illegible]	*[illegible]	*[illegible]	No other peak greater than base discharge.			

Minimum daily discharge, [illegible] ft³/s, [illegible].

[illegible]
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
9	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
12	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
13	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
14	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
15	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
16	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
17	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
18	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
19	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
20	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
21	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
22	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
23	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
24	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
25	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
26	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
27	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
28	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
29	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
30	[illegible]	[illegible]	[illegible]	[illegible]	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
31	[illegible]	---	[illegible]	[illegible]	---	[illegible]	---	[illegible]	---	[illegible]	[illegible]	---
TOTAL	[illegible]	[illegible]	[illegible]	60.3	57.4	71.1	151.4	331.0	861	363.6	173.6	165.3
MEAN	[illegible]	[illegible]	[illegible]	2.02	1.98	2.29	5.05	10.7	28.7	11.7	5.60	5.51
MAX	[illegible]	[illegible]	[illegible]	2.0	2.2	2.4	5.3	25	42	17	5.9	5.9
MIN	[illegible]	[illegible]	[illegible]	2.0	1.9	2.2	2.4	4.5	19	5.6	4.9	5.2
AC-FT	[illegible]	[illegible]	[illegible]	120	114	141	301	661	1710	721	345	329

CAL YR 1983 TOTAL [illegible] MEAN [illegible] MAX [illegible] MIN [illegible] AC-FT [illegible]
WTR YR 1984 TOTAL [illegible] MEAN [illegible] MAX 42 MIN 1.9 AC-FT [illegible]

[illegible] TENMILE CREEK BELOW NORTH TENMILE CREEK, AT FRISCO, CO

LOCATION.--Lat 39°34'[illegible]", long 106°06'36", in SE¼NW¼ sec.34, T.5 S., R.78 W., Summit County, Hydrologic Unit 14010002, on right bank [illegible] ft upstream from bridge on U.S. Highway 6, 160 ft downstream from North Tenmile Creek, and 0.[illegible] mi west of Frisco.

DRAINAGE AREA.--93.3 mi².

PERIOD OF RECORD.--October [illegible] to current year. Prior to October 197[illegible], published as "below North Fork, at Frisco."

GAGE.--Water-stage recorder. Elevation of gage is [illegible] ft above National Geodetic Vertical Datum of [illegible], from topographic map. Prior to Apr. [illegible], 195[illegible] at site [illegible] ft downstream at different datum.

REMARKS.--Estimated daily discharges: Nov. [illegible], Nov. [illegible] to Feb. [illegible], Mar. [illegible], and Apr. [illegible]. Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by a few small diversions upstream from station for irrigation and municipal use and [illegible] diversion from basin in Reservoir. Capacity, [illegible] acre-ft, in [illegible] River basin. [illegible] water temperature were obtained [illegible] published elsewhere in this report.

AVERAGE DISCHARGE.--[illegible] years, [illegible] ft³/s; [illegible] acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, [illegible] ft³/s [illegible], gage height, [illegible] ft, [illegible] estimated above [illegible] ft³/s; minimum daily, [illegible] ft³/s, [illegible]

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of [illegible] ft³/s and maximum (*):

CAL YR [illegible] TOTAL [illegible] MEAN 9[illegible] MAX 591 MIN 18 AC-FT [illegible]120
WTR YR [illegible] TOTAL [illegible] MEAN 93.2 MAX 751 MIN 13 AC-FT 65970

09050700 BLUE RIVER BELOW DILLON, CO

LOCATION.--Lat 39°37'32", long 106°03'57", in SE¼SE¼ sec.12, T.5 S., R.78 W., Summit County, Hydrologic Unit 14010002, on right bank 0.3 mi downstream from Dillon Dam, 0.1 mi upstream from Straight Creek, and 1.1 mi west of Dillon.

DRAINAGE AREA.--335 mi².

PERIOD OF RECORD.--January 1960 to current year.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 8,760 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records good. Flow regulated since Sept. 3, 1963, by Dillon Reservoir, 0.3 mi upstream (station 09050600). Natural flow of stream affected by transmountain diversions, transbasin diversions, and diversions upstream from station for irrigation of about 400 acres of hay meadows. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--25 years (water years 1964-88), 215 ft³/s; 155,800 acre-ft/yr, since completion of Dillon Reservoir.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,010 ft³/s, May 25, 1984, gage height, 3.85 ft; maximum gage height, 3.90 ft, June 12, 1983; no flow, Sept. 4 to Nov. 10, 1963.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,510 ft³/s at 0300 June 11, gage height, 3.38 ft; minimum daily, 49 ft³/s, Dec. 20, 21.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	[illegible]	[illegible]	56	53	53	101	98	[illegible]	526	736	101	101
2	[illegible]	[illegible]	[illegible]	55	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	642	[illegible]	101
3	[illegible]	[illegible]	[illegible]	53	53	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	101	98
4	[illegible]	[illegible]	[illegible]	56	53	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	98
5	[illegible]	[illegible]	[illegible]	56	53	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	98
6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	95
7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	95
8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	95
9	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	95
10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	99	95
11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	98	101
12	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	154	[illegible]	101
13	[illegible]	[illegible]	[illegible]	[illegible]	101	[illegible]	[illegible]	[illegible]	[illegible]	126	[illegible]	101
14	[illegible]	[illegible]	55	[illegible]	101	[illegible]	[illegible]	[illegible]	[illegible]	112	98	101
15	[illegible]	[illegible]	55	[illegible]	101	98	[illegible]	[illegible]	1120	106	99	102
16	[illegible]	[illegible]	[illegible]	[illegible]	101	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	95	103
17	[illegible]	55	[illegible]	[illegible]	101	95	101	139	1090	103	53	103
18	[illegible]	55	51	[illegible]	101	99	[illegible]	200	1050	102	53	101
19	[illegible]	55	55	58	101	98	103	277	1020	103	55	101
20	247	55	49	58	101	101	103	271	1060	103	55	102
21	247	55	49	53	101	101	101	326	1070	[illegible]	56	103
22	145	55	51	53	101	101	103	326	1070	[illegible]	56	103
23	153	55	51	53	101	95	103	329	1030	103	56	103
24	153	55	51	53	101	103	103	331	972	103	55	101
25	73	[illegible]	51	53	98	103	103	331	867	103	92	101
26	55	55	51	59	95	101	101	331	811	103	103	99
27	96	55	53	74	98	103	103	331	790	103	103	101
28	154	55	53	61	95	101	103	327	777	101	103	101
29	126	53	53	53	101	100	103	326	804	103	103	101
30	74	55	53	53	---	99	103	326	777	101	101	101
31	55	---	53	53	---	98	---	326	---	103	101	---
TOTAL	4491	1647	1642	1736	2384	3097	3034	6155	29345	7196	2778	3008
MEAN	145	54.9	53.0	56.0	82.2	99.9	101	199	978	232	89.6	100
MAX	247	58	56	74	101	103	103	331	1490	736	103	103
MIN	55	53	49	51	53	95	98	98	193	101	53	95
AC-FT	8910	3270	3260	3440	4730	6140	6020	12210	58210	14270	5510	5970

CAL YR 1987 TOTAL 74819 MEAN 205 MAX 1060 MIN 46 AC-FT 148400
WTR YR 1988 TOTAL 66513 MEAN 182 MAX 1490 MIN 49 AC-FT 131900

09051050 STRAIGHT CREEK BELOW LASKEY GULCH NR DILLON, CO.

LOCATION.--Lat 39°38'23", long 106°02'23", in SW¼SW¼ sec.5, T.5 S., R.77 W., Summit County, Hydrologic Unit 14010002, on left bank, 120 ft upstream from culverts on Deer Trail Drive, in the community of Dillon Valley, 0.9 mi north of Dillon, 1.1 mi downstream of Laskey Gulch and 1.8 mi upstream from mouth.

DRAINAGE AREA.--18.3 mi².

PERIOD OF RECORD.--October 1986 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 9,070 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 18-21, Dec. 9, 10, 13-18, May 23 to June 21, and Aug. 11 to Sept. 6. Records fair except for estimated daily discharges, which are poor. Diversion upstream from station for municipal purposes downstream from station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 104 ft³/s, June 10, 1988, gage height, 5.28 ft from floodmark; minimum daily, 2.4 ft³/s, Dec. 22, 1987, Feb. 20, 22, 1988.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 104 ft³/s June 10, gage height, 5.28 ft from floodmark; minimum daily, 2.4 ft³/s, Dec. 22, Feb. 20, 22.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.3	6.2	[illegible]	3.3	2.9	3.5	4.8	9.7	46	[illegible]	[illegible]	[illegible]
2	[illegible]	[illegible]	3.8	[illegible]	2.9	2.9	[illegible]	9.1	56	[illegible]	[illegible]	[illegible]
3	[illegible]	[illegible]	[illegible]	[illegible]	2.5	2.8	4.7	7.8	[illegible]	[illegible]	[illegible]	[illegible]
4	[illegible]	[illegible]	[illegible]	[illegible]	2.3	[illegible]	5.5	6.5	[illegible]	[illegible]	[illegible]	[illegible]
5	6.9	[illegible]	[illegible]	[illegible]	2.8	3.8	4.1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	7.4	[illegible]	[illegible]	[illegible]	[illegible]
7	5.5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
9	5.8	4.6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
12	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
13	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
14	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
15	7.1	4.3	4.7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
16	7.8	4.1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
17	6.6	4.1	4.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
18	6.4	4.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
19	6.4	4.0	3.7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
20	[illegible]	[illegible]	3.3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
21	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
22	7.1	4.1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
23	5.6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
24	5.6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
25	[illegible]	[illegible]	[illegible]	[illegible]	2.6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
26	5.9	[illegible]	[illegible]	[illegible]	2.3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
27	5.6	[illegible]	[illegible]	3.0	2.9	4.1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
28	6.1	2.6	[illegible]	[illegible]	[illegible]	4.8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	5.6
29	5.6	2.9	[illegible]	3.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
30	6.1	3.0	[illegible]	3.0	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
31	6.3	---	[illegible]	2.8	---	[illegible]	---	[illegible]	---	[illegible]	[illegible]	---
TOTAL	188.4	133.9	117.8	99.7	78.6	105.3	190.1	645.7	2325	903	294.4	212.6
MEAN	6.08	4.46	3.80	3.22	2.71	3.40	6.34	20.8	77.6	29.1	9.50	7.09
MAX	7.8	6.2	4.4	3.7	3.3	5.0	9.9	50	98	61	19	11
MIN	5.4	2.6	2.4	2.7	2.4	2.7	4.1	6.1	46	15	7.0	4.3
AC-FT	374	266	234	198	156	209	377	1280	4620	1790	584	422

CAL YR 1987 TOTAL 3753.2 MEAN 10.3 MAX 52 MIN 2.4 AC-FT 7440
WTR YR 1988 TOTAL 5298.5 MEAN 14.5 MAX 98 MIN 2.4 AC-FT 10510

09052000 ROCK CREEK NEAR DILLON, CO

LOCATION.--Lat 39°43'23", long 106°07'41", in NE¼ sec.9, T.4 S., R.78 W., Summit County, Hydrologic Unit 14010002, on right bank 500 ft upstream from bridge on State Highway 9, 1,100 ft upstream from mouth, 1,200 ft downstream from confluence of North and South Rock Creeks, and 8 mi northwest of Dillon.

DRAINAGE AREA.--15.8 mi².

PERIOD OF RECORD.--July 1943 to September 1956, October 1966 to current year.

GAGE.--Water-stage recorder. Datum of gage is 8,532.02 ft, (Colorado Highway Department datum). Prior to Apr. 21, 1945, nonrecording gage, and Apr. 21, 1945, to Sept. 12, 1952, water-stage recorder, at site 500 ft downstream at datum 28.76 ft, lower.

REMARKS.--Estimated discharges: Oct. 1-12, Nov. 10, 11, 13, and Nov. 17 to Apr. 26. Records good except for estimated daily discharges, which are poor. A few small diversions for irrigation of hay meadows upstream [illegible] from station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--[illegible] years, (water years 1944-56, 1967-83), 23.[illegible] ft³/s; 16,[illegible] acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 295 ft³/s, June 15, 1973, gage height, 4.[illegible] ft, from rating [illegible]; maximum gage height, [illegible] ft, June [illegible], 1971; minimum daily discharge, [illegible], Apr. [illegible].

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of [illegible] ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
[illegible]	[illegible]	*[illegible]	*[illegible]	No other peak greater than base discharge.			

Minimum discharge, [illegible] ft³/s, [illegible].

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
9	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
12	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
13	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
14	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
15	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
16	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
17	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
18	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
19	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
20	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
21	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
22	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
23	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
24	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	44	[illegible]	[illegible]	[illegible]	[illegible]
25	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	72	[illegible]	[illegible]	[illegible]	[illegible]
26	5.7	6.2	3.0	3.1	3.3	5.7	16	85	97	19	[illegible]	7.0
27	[illegible]	[illegible]	[illegible]	[illegible]	3.0	5.0	[illegible]	56	86	22	[illegible]	7.0
28	[illegible]	5.9	[illegible]	[illegible]	3.0	5.3	9.0	101	75	20	[illegible]	7.0
29	[illegible]	[illegible]	[illegible]	2.0	3.9	5.0	11	[illegible]	103	20	9.6	[illegible]
30	[illegible]	5.7	3.0	[illegible]	---	5.0	15	112	75	19	9.5	7.5
31	[illegible]	---	[illegible]	2.5	---	5.0	---	72	---	19	9.1	---
TOTAL	171.3	179.5	143.1	89.1	91.3	139.6	233.5	1454	3169	1038	412.2	243.0
MEAN	5.52	5.98	4.62	2.55	2.81	4.50	7.79	46.9	106	[illegible]	13.3	8.10
MAX	[illegible]	[illegible]	5.8	3.3	3.0	5.8	16	113	163	62	20	12
MIN	4.8	4.3	3.3	2.3	2.5	3.8	4.7	11	62	19	9.1	5.4
AC-FT	340	357	284	177	181	277	464	2880	6290	2060	818	482

CAL YR 1982 TOTAL 6331.9 MEAN 17.3 MAX 178 MIN 3.0 AC-FT 12560
WTR YR 1983 TOTAL [illegible] MEAN 20.1 MAX 163 MIN 2.3 AC-FT 14570

09052400 BOULDER CREEK AT UPPER STATION, NEAR DILLON, CO

LOCATION.--Lat 39°43'41", long 106°10'22", in SW¼SW¼ sec.6, T.4 S., R.78 W., Summit County, Hydrologic Unit 14010002, on left bank 1.2 mi downstream from Boulder Lake, 3.2 mi upstream from mouth, and 9.4 mi northwest of Dillon.

DRAINAGE AREA.--8.56 mi².

PERIOD OF RECORD.--October 1966 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 9,460 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 31 to May 15, and Aug. 18-22. Records good except for estimated daily discharges, which are poor. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--22 years, 17.3 ft³/s; 12,530 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 216 ft³/s, July 5, 1984, gage height, [illegible] ft; minimum daily, 0.80 ft³/s, Jan. 6, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of [illegible] ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
June [illegible]	[illegible]	*[illegible]	*[illegible]	No other peak greater than base discharge.			

Minimum daily, [illegible] ft³/s, Feb. [illegible].

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
9	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
11	4.7	3.8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
12	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
13	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
14	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
15	4.2	3.6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
16	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
17	4.3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
18	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
19	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
20	3.9	2.6	2.5	[illegible]	[illegible]	[illegible]	7.3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
21	3.7	2.6	2.5	2.4	[illegible]	[illegible]	9.1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
22	3.6	2.6	2.5	2.4	3.5	[illegible]	9.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
23	3.6	2.6	2.5	2.4	3.5	5.3	9.8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
24	3.5	2.6	2.5	2.4	3.5	[illegible]	10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
25	3.7	2.5	2.5	2.4	[illegible]	5.0	10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
26	3.8	2.5	2.5	2.4	3.2	[illegible]	10	53	[illegible]	[illegible]	[illegible]	[illegible]
27	3.9	2.5	2.4	2.4	4.3	6.0	10	50	[illegible]	[illegible]	[illegible]	[illegible]
28	3.1	2.5	2.4	2.4	4.3	6.0	10	47	[illegible]	[illegible]	[illegible]	[illegible]
29	[illegible]	2.5	2.4	2.4	4.5	5.0	10	60	[illegible]	[illegible]	[illegible]	[illegible]
30	3.5	2.5	2.4	2.4	---	5.0	10	64	[illegible]	[illegible]	[illegible]	[illegible]
31	3.9	---	2.4	2.4	---	5.0	---	45	---	[illegible]	[illegible]	---
TOTAL	105.0	80.0	77.0	74.4	91.1	165.3	204.8	956	[illegible]	[illegible]	[illegible]	[illegible]
MEAN	3.39	2.67	2.48	2.40	3.14	5.33	6.83	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MAX	4.3	3.2	2.5	2.4	4.5	6.0	10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MIN	2.6	2.5	2.4	2.4	[illegible]	5.0	5.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
AC-FT	208	159	153	148	181	328	406	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

CAL YR 1987 TOTAL 4629.7 MEAN 12.7 MAX 81 MIN 2.4 AC-FT 9180
WTR YR 1988 TOTAL 5488.6 MEAN 15.0 MAX 132 MIN 2.3 AC-FT 10890

09052800 SLATE CREEK AT UPPER STATION, NEAR DILLON, CO

LOCATION.--Lat 39°45'47", long 106°11'31", in SW¼NW¼ sec.25, T.3 S., R.79 W., Summit County, Hydrologic Unit 14010002, on left bank 0.2 mi upstream from unnamed tributary, 2.7 mi upstream from mouth, and 12 mi northwest of Dillon.

DRAINAGE AREA.--14.2 mi².

PERIOD OF RECORD.--October 1965 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 9,040 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 13-16, and Oct. 24 to Apr. 26. Records good except for estimated daily discharges, which are poor. No diversion upstream from station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--22 years, 23.1 ft³/s; 19,130 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 48[illegible] ft³/s, Aug. 5, 1983, gage height, 6.14 ft, from rating curve extended above 170 ft³/s; maximum gage height, [illegible].56 ft, May 2, 1975 (backwater from beaver dam and [illegible]); minimum daily discharge, 1.9 ft³/s, Mar. 14, [illegible], Jan. 12, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 160 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
[illegible]	[illegible]	*[illegible]	*4.97	June 25	0530	216	4.84

Minimum daily discharge, 3.5 ft³/s, Nov. 15-25.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	[illegible]	[illegible]	[illegible]	3.8	3.8	3.8	4.5	21	[illegible]	88	[illegible]	9.3
2	[illegible]	[illegible]	[illegible]	3.8	3.8	3.8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
3	[illegible]	[illegible]	[illegible]	3.8	3.8	3.8	[illegible]	18	[illegible]	[illegible]	[illegible]	8.4
4	[illegible]	[illegible]	[illegible]	3.8	3.8	3.8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	7.9
5	[illegible]	[illegible]	[illegible]	3.8	3.8	3.8	4.0	[illegible]	176	[illegible]	[illegible]	7.6
6	[illegible]	[illegible]	[illegible]	3.8	3.8	3.8	4.0	[illegible]	194	[illegible]	[illegible]	7.0
7	[illegible]	[illegible]	[illegible]	3.8	3.8	3.8	4.0	[illegible]	[illegible]	[illegible]	[illegible]	6.5
8	[illegible]	[illegible]	[illegible]	3.8	3.8	3.8	4.0	37	[illegible]	[illegible]	[illegible]	6.0
9	[illegible]	[illegible]	[illegible]	3.8	3.8	3.8	4.0	[illegible]	147	[illegible]	[illegible]	5.8
10	[illegible]	[illegible]	[illegible]	3.8	3.8	3.8	4.0	[illegible]	[illegible]	[illegible]	[illegible]	5.6
11	[illegible]	[illegible]	[illegible]	3.8	[illegible]	3.8	4.0	14	[illegible]	[illegible]	16	7.2
12	[illegible]	[illegible]	[illegible]	3.8	[illegible]	3.8	[illegible]	[illegible]	[illegible]	[illegible]	16	12
13	[illegible]	[illegible]	[illegible]	3.8	[illegible]	3.8	[illegible]	37	[illegible]	55	16	15
14	[illegible]	[illegible]	[illegible]	3.8	[illegible]	3.8	4.0	[illegible]	[illegible]	[illegible]	[illegible]	16
15	[illegible]	[illegible]	[illegible]	3.8	[illegible]	3.8	4.0	[illegible]	[illegible]	49	[illegible]	14
16	[illegible]	[illegible]	[illegible]	3.8	[illegible]	[illegible]	4.7	74	[illegible]	[illegible]	[illegible]	11
17	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	18	9.7
18	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	8.9
19	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	7.6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
20	[illegible]	[illegible]	[illegible]	3.8	3.8	4.0	9.0	[illegible]	[illegible]	[illegible]	[illegible]	7.6
21	[illegible]	[illegible]	[illegible]	3.8	3.8	4.0	13	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
22	[illegible]	[illegible]	[illegible]	3.8	3.8	4.0	12	[illegible]	[illegible]	[illegible]	14	7.1
23	[illegible]	[illegible]	[illegible]	3.8	3.8	4.0	14	[illegible]	[illegible]	[illegible]	13	[illegible]
24	[illegible]	[illegible]	[illegible]	3.8	3.8	4.0	16	40	[illegible]	29	[illegible]	[illegible]
25	[illegible]	[illegible]	[illegible]	3.8	3.8	4.0	19	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
26	[illegible]	[illegible]	3.8	3.8	3.8	4.0	13	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
27	[illegible]	[illegible]	3.8	3.8	3.8	4.0	8.7	[illegible]	117	[illegible]	[illegible]	[illegible]
28	[illegible]	[illegible]	3.8	3.8	3.8	4.0	8.8	[illegible]	116	[illegible]	[illegible]	[illegible]
29	[illegible]	[illegible]	3.8	3.8	3.8	4.0	11	[illegible]	[illegible]	29	10	[illegible]
30	[illegible]	[illegible]	3.8	3.8	---	4.0	16	104	103	[illegible]	10	5.5
31	[illegible]	---	3.8	3.8	---	4.0	---	[illegible]	---	[illegible]	10	---
TOTAL	[illegible]	[illegible]	115.8	117.8	110.2	120.3	221.6	1562	[illegible]	[illegible]	[illegible]	[illegible]
MEAN	[illegible]	[illegible]	[illegible]	3.80	[illegible]	3.88	7.39	50.4	[illegible]	[illegible]	[illegible]	[illegible]
MAX	[illegible]	[illegible]	[illegible]	3.8	3.8	4.0	19	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MIN	[illegible]	[illegible]	[illegible]	[illegible]	3.8	3.8	4.0	14	[illegible]	[illegible]	[illegible]	[illegible]
AC-FT	[illegible]	[illegible]	[illegible]	[illegible]	219	239	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

CAL YR 1987 TOTAL [illegible] MEAN [illegible] MAX [illegible] MIN [illegible] AC-FT [illegible]
WTR YR 1988 TOTAL [illegible] MEAN [illegible] MAX 194 MIN [illegible] AC-FT [illegible]

BLUE RIVER BASIN

09053500 BLUE RIVER ABOVE GREEN MOUNTAIN RESERVOIR, CO

WATER-QUALITY RECORDS

PERIOD OF RECORD.--May 1986 to September 1987.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: May 1986 to September 1987.
WATER TEMPERATURES: May 1986 to September 1987.

INSTRUMENTATION.--Water-quality monitor from May 1986 to September 1987 (discontinued).

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily, 239 microsiemens May 10, 1986; minimum daily, 98 microsiemens May [illegible], 1986.
WATER TEMPERATURE: Maximum daily, 18.5°C July 25, 1987; minimum daily, 0.0°C Nov. 10-11, 1986, Apr. 20-21, 1987.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 227 microsiemens Sept. 30; minimum, 99 microsiemens May 15.
WATER TEMPERATURES: Maximum, 18.5°C July 25; minimum, 0.0°C Nov. 10-11, Apr. 20-21.

WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	OXYGEN DEMAND, BIOCHEM 20 DAY, 20 DEG (MG/L)	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB WHOLE WATER TOTAL FIELD MG/L AS CACO3
APR										
14...	[illegible]	125	251	8.[illegible]	1.7	11.2	--	--	[illegible]	[illegible]
28...	1313	278	192	7.7	5.5	9.7	--	--	--	--
MAY										
13...	[illegible]	543	[illegible]	8.[illegible]	9.[illegible]	7.8	2.[illegible]	1.[illegible]	[illegible]	
JUN										
02...	1045	592	131	7.5	10.[illegible]	8.4	--	--	[illegible]	[illegible]
23...	1540	985	131	7.3	14.[illegible]	7.[illegible]	3.6	1.8	87	[illegible]
JUL										
20...	1310	334	[illegible]	8.2	12.5	8.5	--	--	81	[illegible]
SEP										
16...	0950	175	253	7.8	6.4	9.3	1.7	2.8	[illegible]	[illegible]

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)
APR										
14...	35	4.7	6.7	2.0	19	45	4.1	0.6	6.[illegible]	135
28...	--	--	--	--	--	--	--	--	--	--
MAY										
13...	18	2.6	4.9	1.4	33	19	1.9	0.[illegible]	[illegible]	[illegible]
JUN										
02...	27	3.3	3.9	1.8	40	45	1.5	0.4	4.7	[illegible]
23...	29	3.6	3.6	1.8	43	38	1.7	0.4	4.[illegible]	[illegible]
JUL										
20...	38	3.9	4.5	2.1	44	54	2.[illegible]	0.6	4.8	[illegible]
SEP										
16...	29	4.9	5.9	2.2	53	42	2.5	0.5	6.3	[illegible]

DATE	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L)	RESIDUE VOLA-TILE, SUS-PENDED (MG/L)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)
APR										
14...	144	0.19	48.1	--	--	<0.01	0.46	--	<0.[illegible]	--
28...	--	--	--	--	--	--	0.22	--	<0.[illegible]	--
MAY										
13...	73	0.1[illegible]	92.8	--	--	<0.01	[illegible]	--	[illegible]	--
JUN										
02...	117	0.14	253	--	--	--	[illegible]	[illegible]	[illegible]	[illegible]
23...	103	0.12	237	[illegible]	<1	<0.01	<0.10	--	<0.[illegible]	--
JUL										
20...	130	0.1[illegible]	88.4	--	--	--	<0.[illegible]	<0.[illegible]	<0.[illegible]	[illegible]
SEP										
16...	[illegible]	0.1[illegible]	[illegible]	--	--	<0.01	[illegible]	--	[illegible]	--

BLUE RIVER BASIN

[illegible] BLUE RIVER ABOVE GREEN MOUNTAIN RESERVOIR, CO--[illegible]

WATER QUALITY DATA, WATER YEAR OCTOBER [illegible] TO SEPTEMBER [illegible]

[illegible]

09046600 BLUE RIVER ABOVE GREEN MOUNTAIN RESERVOIR, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	[illegible]	[illegible]	[illegible]	[illegible]	---	---	---	---	---	---	---	---
2	[illegible]	[illegible]	[illegible]	[illegible]	---	---	---	---	---	---	---	---
3	[illegible]	[illegible]	[illegible]	[illegible]	---	---	---	---	---	---	---	---
4	[illegible]	[illegible]	[illegible]	[illegible]	---	---	---	---	---	---	---	---
5	[illegible]	[illegible]	[illegible]	[illegible]	---	---	---	---	---	---	---	---
6	[illegible]	[illegible]	[illegible]	[illegible]	---	---	---	---	---	---	---	---
7	[illegible]	[illegible]	[illegible]	[illegible]	---	---	---	---	---	---	---	---
8	[illegible]	[illegible]	[illegible]	[illegible]	---	---	---	---	---	---	---	---
9	[illegible]	[illegible]	[illegible]	[illegible]	---	---	---	---	---	---	---	---
10	[illegible]	[illegible]	[illegible]	[illegible]	---	---	---	---	---	---	---	---
11	[illegible]	[illegible]	[illegible]	[illegible]	---	---	---	---	---	---	---	---
12	[illegible]	[illegible]	[illegible]	[illegible]	---	---	---	---	---	---	---	---
13	[illegible]	[illegible]	---	---	---	---	---	---	---	---	---	---
14	[illegible]	[illegible]	---	---	---	---	---	---	---	---	---	---
15	[illegible]	[illegible]	---	---	---	---	---	---	---	---	---	---
16	[illegible]	[illegible]	---	---	---	---	---	---	---	---	---	---
17	[illegible]	[illegible]	---	---	---	---	---	---	---	---	---	---
18	[illegible]	[illegible]	---	---	---	---	---	---	---	---	---	---
19	[illegible]	[illegible]	---	---	---	---	---	---	---	---	---	---
20	[illegible]	[illegible]	---	---	---	---	---	---	---	---	---	---
21	[illegible]	[illegible]	---	---	---	---	---	---	---	---	---	---
22	[illegible]	[illegible]	---	---	---	---	---	---	---	---	---	---
23	[illegible]	[illegible]	---	---	---	---	---	---	---	---	---	---
24	[illegible]	[illegible]	---	---	---	---	---	---	---	---	---	---
25	[illegible]	[illegible]	---	---	---	---	---	---	---	---	---	---
26	[illegible]	[illegible]	---	---	---	---	---	---	---	---	---	---
27	[illegible]	[illegible]	---	---	---	---	---	---	---	---	---	---
28	[illegible]	[illegible]	---	---	---	---	---	---	---	---	---	---
29	[illegible]	[illegible]	---	---	---	---	---	---	---	---	---	---
30	[illegible]	[illegible]	---	---	---	---	---	---	---	---	---	---
31	[illegible]	[illegible]			---	---	---	---			---	---
MONTH	[illegible]	[illegible]	---	---	---	---	---	---	---	---	---	---

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	[illegible]		[illegible]		[illegible]		[illegible]		[illegible]		[illegible]	
1	---	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
2	---	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
3	---	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
4	---	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
5	---	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
6	---	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7	---	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
8	---	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
9	---	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
10	---	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
11	---	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
12	---	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
13	---	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
14	---	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
15	---	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
16	---	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
17	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
18	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
19	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
20	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
21	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
22	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
23	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
24	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
25	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
26	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
27	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
28	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
29	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
30	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
31			[illegible]	[illegible]			[illegible]	[illegible]	[illegible]	[illegible]		
MONTH	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

09054300 BLACK CREEK BELOW BLACK LAKE, NEAR DILLON, CO

LOCATION.--Lat 39°47'59", long 106°16'04", in SW¼SW¼ sec.8, T.3 S., R.79 W., Summit County, Hydrologic Unit 14010002, on right bank 600 ft upstream from bridge, 0.3 mi downstream from Black Lake, 4.5 mi upstream from highwater line of Green Mountain Reservoir at elevation 7,953 ft, and 17 mi northwest of Dillon.

DRAINAGE AREA.--15.0 mi².

PERIOD OF RECORD.--July 1942 to September 1949, October 1956 to current year.

REVISED RECORDS.--WSP 2124: Drainage area, WDR CO-77-2: 1976.

GAGE.--Water-stage recorder. Elevation of gage is 8,750 ft above National Geodetic Vertical Datum of 1929, from topographic map. July 17, 1942, to May 27, 1943, nonrecording gage, and May 28, 1943, to Sept. 30, 1949, water-stage recorder at site 600 ft downstream at different datums.

REMARKS.--Estimated daily discharges: Nov. 5 to May 8. Records good except for estimated daily discharges, which are poor. No diversion upstream from station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--[illegible] years, [illegible] ft³/s; [illegible] acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, [illegible] ft³/s, June [illegible], 198[illegible], gage height, 4.74 ft, from rating curve extended above [illegible] ft³/s; maximum gage height, [illegible] ft, June [illegible], 19[illegible]; minimum daily discharge, [illegible] ft³/s, Feb. [illegible], 19[illegible], Jan. [illegible], 19[illegible].

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of [illegible] ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
June [illegible]	[illegible]	*[illegible]	*4.[illegible]	June [illegible]	[illegible]	[illegible]	4.[illegible]

Minimum daily discharge, [illegible] ft³/s, [illegible].

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 19[illegible] TO SEPTEMBER 19[illegible]
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

09055300 CATARACT CREEK NEAR KREMMLING, CO

LOCATION.--Lat 39°50'07", long 106°18'57", in SW¼NE¼ sec.35, T.2 S., R.80 W., Summit County, Hydrologic Unit 14010002, on right bank 70 ft downstream from lower Cataract Lake, 2.8 mi upstream from highwater line of Green Mountain Reservoir at elevation 7,950 ft, and 17 mi south of Kremmling.

DRAINAGE AREA.--12.0 mi².

PERIOD OF RECORD.--October 1966 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 8,605 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Record good. No diversion upstream from station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--22 years, 20.6 ft³/s; 14,920 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 353 ft³/s, June 25, 1983, gage height, 5.20 ft, maximum gage height, 5.43 ft, June 21, 1967; minimum daily discharge, 0.28 ft³/s, Oct. 7, 1971.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 160 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
May 18	0100	174	3.99	June 7	0400	*290	*4.50
May 30	0600	160	3.91	June 20	0400	217	4.20
				June 29	0800	187	4.06

Minimum daily discharge, 0.56 ft³/s, Sept. 11.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.6	1.6	2.6	1.9	1.3	.86	1.4	20	59	70	11	3.5
2	2.5	1.8	2.5	1.9	1.3	.86	1.4	19	56	55	11	3.3
3	2.4	2.0	2.5	1.9	1.3	.87	1.4	16	101	47	10	3.2
4	2.3	2.2	2.4	1.7	1.3	.92	1.4	13	184	44	9.1	3.1
5	2.2	2.3	2.4	1.7	1.3	.93	1.6	14	238	44	8.6	2.9
6	2.1	2.4	2.4	1.8	1.3	.98	1.7	20	224	56	8.0	2.8
7	2.1	2.6	2.4	1.8	1.3	1.1	2.0	18	231	47	8.0	2.4
8	1.9	2.6	2.3	1.7	1.3	1.2	2.7	17	208	43	8.1	2.3
9	1.7	2.7	2.3	1.7	1.2	1.2	3.2	14	209	39	7.7	1.7
10	1.4	2.5	2.3	1.7	1.2	1.2	3.4	14	199	34	6.9	.88
11	1.3	2.6	2.3	1.6	1.2	1.3	3.6	13	205	30	6.2	.56
12	1.2	2.4	2.3	1.6	1.2	1.4	4.5	19	157	34	5.7	.70
13	1.1	1.9	2.3	1.6	1.2	1.4	6.6	33	135	33	5.3	1.2
14	1.0	2.0	2.3	1.6	1.2	1.4	8.3	47	81	31	5.0	2.2
15	.88	2.1	2.3	1.6	1.2	1.3	8.9	56	94	30	4.6	2.9
16	.79	2.3	2.3	1.5	1.1	1.4	11	63	107	26	4.6	3.4
17	.87	2.5	2.2	1.5	1.1	1.4	15	108	134	24	5.4	3.0
18	.73	2.5	2.2	1.5	1.1	1.4	15	150	120	22	5.6	2.6
19	.71	2.5	2.2	1.6	1.1	1.4	17	146	161	21	5.6	2.4
20	.74	2.0	2.1	1.5	1.1	1.3	17	77	181	20	5.1	2.3
21	.66	2.6	2.0	1.5	1.1	1.3	18	44	171	17	4.9	2.1
22	.59	2.7	1.9	1.5	.96	1.3	16	37	169	15	5.1	1.9
23	.65	2.7	1.9	1.4	.92	1.2	14	31	142	14	4.9	1.9
24	.68	2.6	2.0	1.4	.89	1.3	11	33	136	13	4.8	1.8
25	.94	2.6	2.0	1.4	.86	1.2	9.6	42	133	12	4.4	1.8
26	.98	2.6	2.0	1.4	.86	1.1	8.8	55	121	11	4.3	1.6
27	1.1	2.6	2.0	1.3	.83	1.2	8.2	83	89	11	4.6	1.5
28	1.3	2.6	2.1	1.3	.80	1.3	8.0	98	108	11	4.4	1.4
29	1.4	2.6	2.1	1.3	.84	1.3	8.9	113	156	11	4.1	1.4
30	1.4	2.6	2.1	1.2	---	1.4	13	141	100	12	3.9	1.3
31	1.4	---	2.0	1.2	---	1.4	---	83	---	11	3.6	---
TOTAL	41.62	72.4	68.7	48.3	32.36	37.82	242.6	1637	4409	888	190.7	64.04
MEAN	1.34	2.41	2.22	1.56	1.12	1.22	8.09	52.8	147	28.6	6.15	2.13
MAX	2.6	2.7	2.6	1.9	1.3	1.4	18	150	238	70	11	3.5
MIN	.59	1.6	1.9	1.2	.80	.86	1.4	13	56	11	3.6	.56
AC-FT	83	144	136	96	64	75	481	3250	8750	1760	378	127

CAL YR 1987 TOTAL 5638.52 MEAN 15.4 MAX 176 MIN .59 AC-FT 11180
WTR YR 1988 TOTAL 7732.54 MEAN 21.1 MAX 238 MIN .56 AC-FT 15340

RESERVOIRS IN BLUE RIVER BASIN

09050600 DILLON RESERVOIR.--Lat 39°37'14", long 106°03'53", in NE¼ sec.13, T.5 S., R.78 W., Summit County, Hydrologic Unit 14010002, in gatehouse at dam, 0.8 mi upstream from Straight Creek, about 1.3 mi southwest of Dillon, and 3.5 mi northeast of Frisco. DRAINAGE AREA, 335 mi². PERIOD OF RECORD, September 1963 to current year. GAGE, nonrecording gage read once daily. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Denver Board of Water Commissioners); gage readings have been reduced to elevations above National Geodetic Vertical Datum of 1929.

Reservoir is earth and rockfill dam. Dam completed and storage began Sept. 3, 1963; dead storage pool filled Sept. 12, 1963. Capacity, 254,000 acre-ft between elevations 8,829.00 ft, invert of outlet valve, and 9,017.00 ft, crest of spillway. Dead storage, 3,270 acre-ft. Figures given represent usable contents. Reservoir stores water for transmountain diversion to South Platte River basin through Harold D. Roberts tunnel for municipal use by city of Denver. Records provided by Denver Board of Water Commissioners.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 262,200 acre-ft, June 30, 1983, elevation, 9,019.46 ft; minimum since appreciable storage was attained in July 1964, 45,310 acre-ft, Apr. 20, 1965, elevation, 8,904.16 ft.

EXTREMES FOR CURRENT YEAR: Maximum contents, 260,500 acre-ft, June 10, elevation, 9,018.96 ft; minimum, 231,100 acre-ft, Apr. 10, 11, elevation, 9,009.61.

09057000 GREEN MOUNTAIN RESERVOIR.--Lat 39°52'42", long 106°19'45", in NE¼ sec.15, T.2 S., R.80 W., Summit County, Hydrologic Unit 14010002, in hoist house at right end of dam, 0.6 mi upstream from Elliott Creek, and 13 mi southeast of Kremmling. DRAINAGE AREA, 598 mi², includes 15.3 mi² of Elliott Creek above diversion for Elliott Creek feeder canal. PERIOD OF RECORD, November 1942 to current year. REVISED RECORDS, WSP 2124: Drainage area. GAGE, Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation); gage readings have been reduced to elevations above National Geodetic Vertical Datum of 1929.

Reservoir is formed by an earth and rockfill dam. Dam completed and storage began November 1942. Capacity, 146,900 acre-ft between elevations 7,800 ft, sill of outlet gate, and 7,950 ft, top of radial spillway gates. Dead storage, 6,860 (revised) acre-ft. Figures given represent usable contents. Reservoir is used for power development and storage for replacement of water diverted to South Platte River basin. Water released to fill decrees during late irrigation season when flow of Colorado River is deficient. Records provided by U.S. Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 148,900 acre-ft, July 10, 1947, elevation, 7,950.95 ft; minimum since appreciable storage was attained, 388 acre-ft, Jan. 12, 1963, elevation, 7,801.70 ft.

EXTREMES FOR CURRENT YEAR: Maximum contents, 142,600 acre-ft, July 20, elevation, 7,948.03 ft; minimum, 52,770 acre-ft, May 12, elevation, 7,890.22 ft.

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
	09050600	DILLON RESERVOIR		09057000	GREEN MOUNTAIN	RESERVOIR
Sept. 30........	9,015.76	250,000	-	7,934.47	116,000	-
Oct. 31........	9,014.58	246,300	-3,700	7,924.52	98,700	-17,300
Nov. 30........	9,014.13	245,000	-1,300	7,919.21	90,430	-8,270
Dec. 31........	9,012.83	241,000	-4,000	7,914.27	82,940	-7,490
CAL YR 1987..	-	-	+2,400	-	-	-20,400
Jan. 31........	9,012.06	238,500	-2,500	7,908.55	74,940	-8,000
Feb. 29........	9,010.56	234,000	-4,500	7,902.53	67,070	-7,870
Mar. 31........	9,009.70	231,400	-2,600	7,894.93	57,950	-9,120
Apr. 30........	9,010.56	234,000	+2,600	7,891.59	54,240	-3,710
May 31........	9,016.52	252,500	+18,500	7,905.50	70,890	+16,650
June 30........	9,018.13	257,700	+5,200	7,946.71	139,900	+69,010
July 31........	9,016.05	251,000	-6,700	7,945.71	137,800	-2,100
Aug. 31........	9,014.01	244,500	-6,500	7,931.45	110,600	-27,200
Sept. 30........	9,014.16	245,000	+500	7,918.16	88,680	-21,920
WTR YR 1988..	-	-	-5,000	-	-	-27,320

09057500 BLUE RIVER BELOW GREEN MOUNTAIN RESERVOIR, CO

LOCATION.--Lat 39°52'49", long 106°20'00", in SW¼NE¼ sec.15, T.2 S., R.80 W., Summit County, Hydrologic Unit 14010002, on left bank 0.3 mi upstream from Elliott Creek, 0.3 mi downstream from Green Mountain Dam, and 13 mi southeast of Kremmling.

DRAINAGE AREA.--599 mi², includes 15.3 mi² of Elliott Creek above diversion for Elliott Creek feeder canal.

PERIOD OF RECORD.--October 1937 to current year. Prior to October 1943, published as Blue River below Green Mountain Reservoir, near Kremmling. Water-quality data available, January 1986 to September 1987.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 7,682.66 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation). Prior to Oct. 1, 1951, water-stage recorder at site 3.7 mi downstream at different datum.

REMARKS.--No estimated daily discharges. Records excellent. Flow regulated by Green Mountain Reservoir since November 1942 (station 09057000). Diversions for irrigation of about 5,000 acres upstream from station. Transmountain diversions upstream from station (see elsewhere in this report).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,000 ft³/s, June 4, 1938, gage height, 5.93 ft, site and datum then in use, from rating curve extended above 3,000 ft³/s; maximum gage height, 9.52 ft, July 11, 1983; minimum daily discharge (prior to construction of Green Mountain Reservoir), 80 ft³/s, Feb. 18-24, 1938, Feb. 18-19, 1940; no flow at times in 1943.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,190 ft³/s at 1100 July 1, gage height, 6.40 ft; minimum daily, 201 ft³/s, Dec. 24.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	704	258	207	205	216	301	287	363	420	1160	547	648
2	701	256	220	203	215	301	280	358	422	1180	453	639
3	698	259	215	205	214	299	280	357	472	1090	399	638
4	703	258	212	230	216	296	282	358	517	986	444	638
5	702	256	208	230	219	297	281	361	513	318	513	638
6	704	259	207	207	215	294	284	359	513	674	578	638
7	700	256	207	207	215	294	286	356	513	675	561	633
8	702	256	212	217	214	298	315	359	516	674	585	631
9	700	257	209	211	216	298	334	360	516	675	663	631
10	699	257	202	213	214	297	332	360	562	674	744	631
11	705	256	204	217	214	297	330	363	620	543	779	631
12	706	251	202	224	214	297	330	345	619	393	780	626
13	670	261	205	226	217	301	330	294	621	339	805	577
14	560	262	204	226	217	298	333	280	686	334	813	532
15	486	257	207	225	216	297	318	273	772	305	809	534
16	488	255	204	220	214	297	270	273	773	288	805	504
17	492	237	208	220	224	290	267	277	731	286	782	480
18	493	212	206	221	282	285	266	272	669	294	742	482
19	443	215	209	222	295	282	269	231	670	313	733	484
20	407	214	204	223	292	280	317	270	672	362	733	484
21	387	208	205	223	292	284	361	271	678	399	730	482
22	361	206	205	219	293	284	364	269	675	424	729	460
23	321	212	206	212	296	288	359	273	656	461	712	421
24	257	211	201	215	296	287	362	273	695	458	687	420
25	256	210	206	217	293	284	360	270	751	468	686	417
26	256	210	204	217	300	282	361	270	744	476	688	418
27	256	211	209	213	295	288	361	338	740	493	688	408
28	256	212	211	217	294	285	361	421	734	592	688	388
29	262	212	207	218	293	290	360	423	727	608	688	388
30	264	210	209	215	---	284	358	422	892	616	684	394
31	259	---	211	215	---	286	---	419	---	594	656	---
TOTAL	15598	7094	6426	6733	7191	9041	9598	10118	19089	17652	20904	15895
MEAN	503	236	207	217	248	292	320	326	636	569	674	530
MAX	706	262	220	230	300	301	364	423	892	1180	813	648
MIN	256	206	201	203	214	280	266	231	420	286	399	388
AC-FT	30940	14070	12750	13350	14260	17930	19040	20070	37860	35010	41460	31530

CAL YR 1987 TOTAL 138141.0 MEAN 378 MAX 722 MIN 1.0 AC-FT 274000
WTR YR 1988 TOTAL 145339 MEAN 397 MAX 1180 MIN 201 AC-FT 288300

09058000 COLORADO RIVER NEAR KREMMLING, CO

LOCATION.--Lat 40°02'12", long 106°26'22", in NE¼SW¼ sec.23, T.1 N., R.81 W., Grand County, Hydrologic Unit 14010001, on right bank at upstream end of Gore Canyon, 3.0 mi southwest of Kremmling, and 3.8 mi downstream from Blue River.

DRAINAGE AREA.--2,382 mi².

PERIOD OF RECORD.--July 1904 to September 1918 (published as Grand River near Kremmling), October 1961 to September 1970, October 1971 to current year.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 7,320 ft above National Geodetic Vertical Datum of 1929, from topographic map. See WSP 1313 for history of changes prior to Oct. 1, 1961.

REMARKS.--Estimated daily discharges: Dec. 16 to Jan. 1, Jan. 4-19, Jan. 21 to Feb. 3, and Feb. 8-16. Records good. Natural flow of stream affected by transmountain diversions, storage reservoirs, diversions for irrigation of about 40,000 acres upstream from station, and return flow from irrigated areas. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--26 years (water years 1962-70, 1972-88), 1,054 ft³/s; 763,600 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 21,500 ft³/s, June 7, 1912, gage height, 21.8 ft, datum then in use, from rating curve extended above 14,000 ft³/s; minimum observed, 166 ft³/s, Dec. 19, 1907.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,280 ft³/s at 1400 May 20, gage height, 9.47 ft; minimum daily, 403 ft³/s, Dec. 14.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	826	582	495	520	500	586	652	1680	1710	2200	991	887
2	825	598	533	504	500	596	678	1600	1390	2190	906	882
3	823	616	540	521	500	596	782	1400	1210	2070	871	840
4	831	610	531	510	495	598	999	1360	1310	1980	878	832
5	826	595	533	510	493	594	1100	1400	1370	1720	934	831
6	824	639	533	510	500	593	999	1510	1460	1410	984	833
7	820	654	522	510	512	597	1170	1500	1390	1340	1000	829
8	822	657	529	510	520	589	1360	1400	1380	1260	982	882
9	821	645	517	510	520	591	1140	1360	1230	1230	979	880
10	825	632	519	510	520	590	997	1350	1260	1240	1030	931
11	828	634	517	510	520	588	979	1310	1240	1240	1060	927
12	830	630	496	510	520	577	1090	1380	1220	1150	1050	907
13	834	631	504	510	520	587	1260	1530	1190	978	1070	875
14	784	635	403	510	520	587	1290	1780	1130	835	1080	804
15	714	643	516	510	520	590	1360	2040	1120	800	1070	802
16	711	634	520	510	520	597	1440	2220	1080	817	1070	793
17	705	639	520	510	510	598	1510	2360	1040	786	1060	762
18	704	593	520	510	510	572	1430	2420	1000	760	1030	746
19	673	564	520	510	618	572	1470	2680	1110	777	1020	746
20	601	507	520	481	639	575	1480	3160	1160	879	1000	734
21	592	509	540	500	595	586	1590	2700	1310	923	1000	708
22	551	516	540	500	589	594	1530	2120	1440	943	1030	706
23	542	532	540	500	591	603	1350	1920	2110	988	995	662
24	468	531	540	500	574	625	1230	1670	1890	973	946	661
25	486	513	540	500	572	611	1190	1620	1630	974	944	657
26	497	520	540	500	577	619	1150	1640	1310	979	989	656
27	485	519	550	500	576	693	1110	1700	1300	924	1000	658
28	470	508	560	500	584	811	1100	1930	1360	909	996	641
29	471	514	560	500	581	723	1160	2070	1740	947	960	644
30	490	517	560	500	---	698	1420	2120	2190	986	940	637
31	577	---	540	500	---	659	---	2100	---	985	896	---
TOTAL	21256	17517	16298	15686	15696	18995	36016	57030	41280	36193	30761	23353
MEAN	686	584	526	506	541	613	1201	1840	1376	1168	992	778
MAX	834	657	560	521	639	811	1590	3160	2190	2200	1080	931
MIN	468	507	403	481	493	572	652	1310	1000	760	871	637
AC-FT	42160	34740	32330	31110	31130	37680	71440	113100	81880	71790	61010	46320

CAL YR 1987 TOTAL 294862 MEAN 808 MAX 1840 MIN 403 AC-FT 584900
WTR YR 1988 TOTAL 330081 MEAN 902 MAX 3160 MIN 403 AC-FT 654700

COLORADO RIVER MAIN STEM

09058030 COLORADO RIVER NEAR RADIUM, COLORADO

LOCATION.--Lat 39°58'01", long 106°31'22", in NW¼NW¼ sec.24, T.1 S., R.82 W., Grand County, Hydrologic Unit 14010001, on left bank, 1.0 mi upstream from Blacktail Creek, 2.0 mi northeast of Radium, and 3.0 mi downstream from Canyon Creek.

DRAINAGE AREA.--2,412 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1981 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,910 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Dec. 15 to May 13. Records good except for estimated daily discharges, which are fair. Natural flow of stream affected by transmountain diversions, storage reservoirs, diversions for irrigation of about 40,000 acres upstream from station, and return flow from irrigated areas.

AVERAGE DISCHARGE.--7 years, 1,407 ft³/s; 1,019,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,800 ft³/s, probably occurred on May 26, 1984, gage height, 12.91 ft, from highwater mark in well; minimum daily, 370 ft³/s, Dec. 23-25, 1981.

EXTREMES FOR CURRENT PERIOD.--Maximum discharge, 3,350 ft³/s at 1800 May 20, gage height, 6.06 ft; minimum daily, 422 ft³/s, Dec. 14.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	854	594	504	520	525	620	700	1680	1820	2190	1070	953
2	850	604	540	485	525	620	800	1590	1480	2190	987	950
3	847	620	565	500	520	620	925	1420	1250	2090	948	909
4	853	623	563	530	515	620	1060	1390	1360	2010	946	904
5	853	604	560	540	510	620	1090	1460	1440	1790	1000	902
6	847	647	560	539	510	620	1120	1510	1550	1490	1050	902
7	841	662	560	530	520	620	1280	1510	1470	1420	1060	896
8	843	665	560	530	528	620	1400	1400	1460	1320	1040	943
9	840	656	528	530	530	620	1180	1380	1280	1300	1030	936
10	843	644	540	530	535	620	1010	1350	1290	1310	1080	986
11	846	644	542	525	540	610	1050	1360	1290	1320	1120	993
12	850	644	506	521	540	600	1200	1500	1250	1230	1110	974
13	853	641	482	520	540	605	1290	1700	1210	1050	1130	946
14	812	644	422	520	540	610	1340	1990	1160	902	1140	879
15	738	653	500	522	540	610	1400	2050	1140	869	1130	879
16	724	650	535	530	540	618	1490	2240	1110	886	1130	869
17	714	650	540	530	540	610	1520	2400	1080	855	1130	845
18	713	607	540	520	610	600	1470	2480	1030	832	1090	830
19	692	584	540	500	650	600	1490	2670	1140	839	1090	828
20	615	528	540	500	660	600	1520	3220	1180	933	1070	818
21	612	530	520	510	630	600	1600	2830	1370	982	1070	794
22	568	537	540	520	620	618	1520	2220	1510	1000	1100	788
23	563	552	560	520	610	640	1350	2000	2130	1040	1060	742
24	496	555	550	520	600	640	1250	1770	1980	1030	1020	738
25	494	530	540	510	600	640	1180	1690	1740	1030	1020	737
26	506	540	540	518	600	720	1150	1710	1410	1040	1050	735
27	508	542	560	520	600	820	1120	1770	1380	999	1070	735
28	494	518	580	522	600	840	1150	1980	1420	966	1060	712
29	487	516	580	525	600	765	1320	2120	1740	1010	1040	715
30	499	520	570	525	---	720	1580	2170	2170	1050	1010	712
31	581	---	560	525	---	685	---	2170	---	1050	966	---
TOTAL	21836	17904	16727	16137	16378	19951	37555	58730	42840	38023	32817	25550
MEAN	704	597	540	521	565	644	1252	1895	1428	1227	1059	852
MAX	854	665	580	540	660	840	1600	3220	2170	2190	1140	993
MIN	487	516	422	485	510	600	700	1350	1030	832	946	712
AC-FT	43310	35510	33180	32010	32490	39570	74490	116500	84970	75420	65090	50680

CAL YR 1987 TOTAL 305080 MEAN 836 MAX 1870 MIN 422 AC-FT 605100
WTR YR 1988 TOTAL 344448 MEAN 941 MAX 3220 MIN 422 AC-FT 683200

09058030 COLORADO RIVER NEAR RADIUM, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--August 1981 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	TUR-BID-ITY (FTU)	OXYGEN, DIS-SOLVED (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	CALCIUM TOTAL RECOV-ERABLE (MG/L AS CA)	MAGNE-SIUM, TOTAL RECOV-ERABLE (MG/L AS MG)
OCT										
07...	1000	831	224	7.8	8.0	1.4	9.4	K4	26	4.3
MAR										
30...	1345	--	282	7.4	2.5	4.9	11.7	K6	29	6.8
APR										
29...	0900	1200	276	7.5	6.5	3.3	9.7	31	35	7.9
MAY										
25...	1150	1670	208	7.6	10.5	37	8.7	K56	26	5.7
JUN										
28...	1100	1400	--	7.6	14.0	3.2	7.6	56	34	7.8
AUG										
03...	0945	953	221	8.5	14.9	5.3	8.5	42	24	4.8
31...	1100	980	209	8.5	17.0	3.0	9.1	23	26	4.5
SEP										
21...	1115	735	210	8.6	12.5	2.6	9.2	210	25	4.1

DATE	SODIUM, TOTAL RECOV-ERABLE (MG/L AS NA)	POTAS-SIUM, TOTAL RECOV-ERABLE (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)
OCT										
07...	6.2	1.5	62	<0.5	45	[illegible]	139	8	<0.01	<0.10
MAR										
30...	11	3.3	77	--	58	4.5	175	14	--	--
APR										
29...	9.9	2.1	78	<0.5	52	3.1	182	49	<0.01	<0.10
MAY										
25...	7.0	1.5	67	<0.5	36	2.0	124	96	<0.01	<0.10
JUN										
28...	9.2	1.4	84	<0.5	50	2.7	167	30	<0.01	<0.10
AUG										
03...	7.6	1.4	73	--	33	2.1	124	20	<0.01	<0.10
31...	5.1	1.9	62	<0.5	37	2.5	125	12	<0.01	<0.10
SEP										
21...	4.5	1.3	62	<0.5	36	2.5	137	2	<0.01	<0.10

DATE	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHOROUS TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	CYANIDE TOTAL (MG/L AS CN)
OCT									
07...	<0.2	0.01	0.01	<1	110	<1	<1	3	--
MAR									
30...	--	--	--	2	30	<1	<1	3	--
APR									
29...	0.4	0.05	0.02	1	10	1	2	5	<0.01
MAY									
25...	0.2	0.04	0.03	<1	50	2	8	[illegible]	<0.01
JUN									
28...	0.3	0.03	0.02	1	30	<1	2	4	<0.01
AUG									
03...	0.2	0.04	0.02	<1	30	<1	1	3	--
31...	0.3	0.03	<0.01	2	<10	<1	<1	9	<0.01
SEP									
21...	0.3	0.02	0.01	1	50	<1	2	4	<0.01

K BASED ON NON-IDEAL COLONY COUNT.

09058030 COLORADO RIVER NEAR RADIUM, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)
OCT									
07...	240	40	<5	30	<10	<0.1	2	<1	<1
MAR									
30...	690	50	<5	50	30	<0.1	1	<1	<1
APR									
29...	2600	80	14	70	20	<0.1	3	<1	1
MAY									
25...	3000	80	7	100	20	<0.1	15	<1	<1
JUN									
28...	720	80	6	70	30	<0.1	5	1	<1
AUG									
03...	700	30	6	90	10	<0.1	2	<1	<1
31...	420	30	<5	60	10	0.1	4	<1	<1
SEP									
21...	340	50	<5	40	20	<0.1	<1	<1	<1

09058500 PINEY RIVER BELOW PINEY LAKE, NEAR MINTURN, CO

LOCATION.--Lat 39°42'29", long 106°25'34", Eagle County, Hydrologic Unit 14010001, on left bank 1.4 mi upstream from Dickson Creek, 2.0 mi downstream from Piney Lake, and 8.5 mi north of Minturn.

DRAINAGE AREA.--13.0 mi².

PERIOD OF RECORD.--October 1947 to September 1954, October 1963 to current year.

GAGE.--Water-stage recorder. Datum of gage is 9,145.25 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation). Prior to October 1963, water-stage recorder at site 15 ft upstream at present datum.

REMARKS.--Estimated daily discharges: Nov. 10 to Apr. 14. Records good except for estimated daily discharges, which are poor. No diversion upstream from station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--32 years (1948-54, 1964-88), 25.0 ft³/s; 18,110 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 560 ft³/s, June 8, 1985, gage height, 5.12 ft; maximum gage height observed, 6.44 ft, Apr. 13, 1977; minimum not determined.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 150 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
May 19	0400	178	4.35	June 20	0100	226	4.48
May 30	0400	196	4.40	June 29	0600	246	4.53
June 5	0200	*322	*4.70				

Minimum daily discharge, 1.4 ft³/s, Sept. 7, 8.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.8	4.2	2.1	2.0	2.1	2.3	4.0	29	61	62	8.8	1.9
2	2.6	5.1	2.0	1.7	2.0	2.3	4.0	23	58	53	8.5	1.8
3	2.6	5.2	2.2	1.5	2.0	2.3	4.4	18	118	44	8.0	1.7
4	2.4	4.8	2.2	1.6	1.9	2.2	4.8	18	219	41	7.7	1.6
5	2.4	4.5	2.1	1.8	1.8	2.1	5.2	22	250	40	6.6	1.5
6	2.3	4.7	2.1	2.0	1.9	2.2	6.0	25	208	40	5.7	1.5
7	2.3	4.9	2.2	2.2	2.0	2.2	8.2	20	220	36	5.9	1.4
8	2.3	4.8	2.1	2.2	2.2	2.4	12	19	203	34	6.6	1.4
9	2.1	4.8	2.0	2.2	2.3	2.6	10	16	206	28	6.3	1.5
10	2.1	4.5	2.0	2.1	2.1	2.2	8.0	16	176	22	5.5	1.5
11	2.1	4.0	2.0	2.1	2.2	2.1	9.4	18	180	20	4.9	1.7
12	2.1	3.6	1.9	2.0	2.2	2.4	11	29	124	23	4.7	2.4
13	2.1	3.2	1.7	1.8	2.1	2.5	14	55	101	20	4.5	3.3
14	2.4	2.8	1.6	1.7	2.1	2.5	24	83	71	18	4.4	4.0
15	2.9	2.5	1.6	1.8	2.2	2.4	23	99	83	17	3.9	4.0
16	3.3	2.1	1.6	2.0	2.1	2.3	23	125	91	15	4.0	3.6
17	3.4	2.0	1.7	2.2	2.3	2.6	25	130	105	14	4.3	3.2
18	3.4	2.0	1.9	2.2	2.1	2.8	27	133	103	13	4.3	2.9
19	3.1	2.0	2.0	2.1	2.0	2.5	28	140	172	12	4.0	2.8
20	3.1	2.1	2.1	1.6	2.2	2.4	28	74	168	11	3.5	2.6
21	3.5	2.2	2.0	1.6	2.0	2.4	29	49	139	11	3.4	2.5
22	2.7	2.2	1.9	1.8	1.9	2.5	24	36	141	9.8	3.4	2.4
23	2.5	2.1	1.8	1.9	2.0	2.5	20	29	111	9.5	3.3	2.3
24	2.5	2.0	2.0	2.0	2.0	2.5	16	37	124	9.2	3.0	2.3
25	3.0	2.0	2.0	1.9	2.2	2.5	14	62	114	8.5	2.7	2.3
26	3.3	2.0	1.9	1.8	2.3	3.0	14	74	103	8.5	2.5	2.2
27	3.4	2.1	1.8	1.9	2.4	3.4	12	89	90	8.8	2.5	2.3
28	3.3	2.2	2.0	2.0	2.4	4.0	11	91	104	8.5	2.4	2.3
29	3.3	2.2	2.0	2.1	2.4	4.4	14	119	170	8.5	2.1	2.1
30	3.5	2.2	1.9	2.2	---	3.8	20	146	79	8.5	2.0	2.1
31	3.9	---	2.1	2.2	---	3.8	---	73	---	7.9	2.0	---
TOTAL	86.7	95.0	60.5	60.2	61.4	82.1	453.0	1897	4092	661.7	141.4	69.1
MEAN	2.80	3.17	1.95	1.94	2.12	2.65	15.1	61.2	136	21.3	4.56	2.30
MAX	3.9	5.2	2.2	2.2	2.4	4.4	29	146	250	62	8.8	4.0
MIN	2.1	2.0	1.6	1.5	1.8	2.1	4.0	16	58	7.9	2.0	1.4
AC-FT	172	188	120	119	122	163	899	3760	8120	1310	280	137

CAL YR 1987 TOTAL 6321.8 MEAN 17.3 MAX 182 MIN 1.3 AC-FT 12540
WTR YR 1988 TOTAL 7760.1 MEAN 21.2 MAX 250 MIN 1.4 AC-FT 15390

09058610 DICKSON CREEK NEAR VAIL, CO

LOCATION.--Lat 39°42'14", long 106°27'23", Eagle County, Hydrologic Unit 14010001, on right bank 0.6 mi upstream from Freeman Creek, 1.0 mi upstream from mouth, and 6 mi northwest of Vail.

DRAINAGE AREA.--3.41 mi².

PERIOD OF RECORD.--October 1971 to current year. Prior to October 1972, published as "near Minturn."

GAGE.--Water-stage recorder. Elevation of gage is 9,245 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 17 to April 12. Records good except for estimated daily discharges, which are poor. Diversion by Willy N. ditch 75 ft upstream for irrigation of hay meadows downstream from station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--17 years, 2.22 ft³/s; 1,610 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 48 ft³/s, May 6, 1979, gage height, 2.75 ft; maximum gage height, 4.89 ft, May 9, 1984 (backwater from ice); no flow at times some years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6.4 ft³/s at 2100 May 18, gage height, 2.41 ft; minimum daily, 0.40 ft³/s, Aug. 11-14.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.94	1.2	.76	.72	.75	.80	1.0	2.7	3.8	1.4	.93	.72
2	.93	1.2	.76	.64	.70	.89	1.0	2.3	3.6	1.4	.80	.79
3	.93	1.0	.84	.64	.70	.89	1.1	2.1	3.6	1.3	.72	.72
4	.93	.94	.84	.74	.60	.84	1.1	2.2	3.9	1.3	.72	.72
5	.93	.93	.78	.84	.60	.84	1.1	2.7	4.5	1.4	.64	.76
6	1.0	1.0	.84	.84	.68	.90	1.2	2.7	4.3	1.3	.57	.77
7	1.0	1.0	.84	.84	.78	.86	1.3	2.5	4.1	1.2	.64	.75
8	1.0	1.0	.80	.84	.84	1.0	1.3	2.5	4.1	1.2	.57	.75
9	1.0	.94	.80	.84	.84	1.0	1.3	2.5	3.9	1.2	.51	.68
10	1.1	.93	.80	.84	.84	.90	1.2	2.5	3.7	1.2	.45	.72
11	1.1	1.0	.90	.84	.84	.90	1.2	2.7	3.5	1.2	.40	.87
12	1.1	.94	.82	.78	.80	.99	1.2	3.4	3.2	1.2	.40	.87
13	1.0	1.0	.72	.68	.80	.99	1.4	3.7	3.2	1.1	.40	.95
14	1.2	1.0	.66	.62	.80	.99	1.5	4.1	2.9	1.1	.40	.88
15	1.2	1.0	.66	.62	.80	.93	1.4	4.1	2.6	1.1	.42	.77
16	1.2	.87	.66	.72	.83	.93	1.5	4.1	2.5	1.0	.51	.71
17	1.1	.80	.78	.80	.94	1.0	1.6	4.2	2.3	1.0	.57	.67
18	1.0	.80	.84	.80	.87	1.0	1.6	4.7	2.2	1.0	.51	.65
19	.94	.76	.84	.80	.80	.93	1.7	5.2	2.4	1.1	.45	.62
20	.93	.84	.84	.60	.80	.86	2.0	4.1	2.2	.94	.45	.63
21	.93	.92	.80	.54	.74	.86	2.0	3.6	2.0	.87	.57	.64
22	.93	.92	.73	.54	.74	.86	1.6	3.1	2.2	.87	.57	.59
23	.93	.92	.80	.60	.70	.82	1.5	3.1	2.0	.80	.51	.59
24	1.1	.92	.88	.60	.76	.80	1.4	3.1	1.8	.83	.51	.59
25	1.2	.92	.88	.56	.84	.80	1.4	3.2	1.7	.87	.51	.58
26	1.1	.86	.80	.56	.88	.87	1.4	3.4	1.7	.93	.57	.57
27	.94	.88	.74	.62	.88	.98	1.5	3.9	1.7	.93	.64	.59
28	.93	.88	.74	.75	.88	1.1	1.6	4.5	1.9	.93	.64	.65
29	.93	.86	.80	.75	.88	1.1	1.9	4.9	1.8	.93	.64	.58
30	1.1	.80	.80	.75	---	1.0	2.6	4.9	1.5	.93	.67	.62
31	1.1	---	.80	.75	---	1.0	---	4.3	---	.93	.68	---
TOTAL	31.72	28.03	24.55	22.06	22.91	28.63	43.6	107.0	84.8	33.46	17.57	21.00
MEAN	1.02	.93	.79	.71	.79	.92	1.45	3.45	2.83	1.08	.57	.70
MAX	1.2	1.2	.90	.84	.94	1.1	2.6	5.2	4.5	1.4	.93	.95
MIN	.93	.76	.66	.54	.60	.80	1.0	2.1	1.5	.80	.40	.57
AC-FT	63	56	49	44	45	57	86	212	168	66	35	42

CAL YR 1987 TOTAL 460.02 MEAN 1.26 MAX 5.1 MIN .40 AC-FT 912
WTR YR 1988 TOTAL 465.33 MEAN 1.27 MAX 5.2 MIN .40 AC-FT 923

09058700 FREEMAN CREEK NEAR MINTURN, CO

LOCATION.--Lat 39°41'54", long 106°26'42", Eagle County, Hydrologic Unit 14010001, on right bank 0.8 mi upstream from mouth and 7.5 mi north of Minturn.

DRAINAGE AREA.--2.94 mi².

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 9,335 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 9 to April 13. Records fair except for estimated daily discharges, which are poor. No regulation or diversion upstream from station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--24 years, 1.39 ft³/s; 1,010 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 82 ft³/s, May 25, 1984, gage height, 2.21 ft, maximum gage height, 3.51 ft, May 18, 1973 (backwater from ice); no flow for some days some years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 25 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
May 15	1800	*43	*2.11				

Minimum daily, 0.05 ft³/s, Oct. 7, 10, Jan. 20, 21, 25, 26.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.11	.18	.10	.09	.11	.12	.16	2.7	4.1	.82	.12	.12
2	.09	.24	.10	.08	.10	.12	.17	2.7	3.6	.78	.10	.12
3	.07	.24	.11	.07	.10	.13	.18	2.7	3.6	.72	.12	.12
4	.09	.20	.11	.07	.09	.12	.19	2.7	3.5	.65	.11	.12
5	.07	.16	.11	.07	.07	.12	.20	2.8	3.5	.67	.11	.12
6	.08	.16	.12	.08	.07	.12	.21	3.0	3.4	.62	.11	.06
7	.05	.18	.12	.11	.09	.12	.24	2.7	3.1	.50	.12	.10
8	.08	.17	.11	.11	.10	.13	.27	2.7	2.8	.43	.12	.10
9	.06	.14	.11	.11	.12	.14	.24	2.6	2.6	.40	.11	.10
10	.05	.14	.12	.10	.10	.12	.21	2.5	2.4	.39	.10	.12
11	.07	.15	.12	.09	.10	.12	.22	3.2	2.2	.35	.10	.12
12	.07	.12	.10	.08	.09	.14	.24	5.6	2.2	.34	.11	.13
13	.11	.12	.08	.07	.09	.14	.34	11	2.1	.30	.10	.14
14	.16	.13	.07	.07	.09	.14	.50	15	1.9	.24	.09	.13
15	.16	.12	.07	.08	.09	.13	.55	16	1.7	.21	.10	.12
16	.17	.11	.07	.09	.10	.12	.61	15	1.6	.26	.12	.11
17	.14	.11	.08	.08	.11	.14	.72	12	1.5	.23	.12	.11
18	.12	.09	.10	.07	.10	.16	.94	15	1.4	.22	.12	.11
19	.11	.08	.10	.06	.09	.14	1.3	11	2.0	.19	.12	.11
20	.10	.11	.11	.05	.10	.13	1.6	6.7	1.6	.18	.11	.11
21	.09	.14	.09	.05	.11	.13	1.9	5.1	1.3	.17	.12	.11
22	.09	.14	.09	.06	.11	.14	1.9	4.2	1.6	.15	.12	.12
23	.08	.13	.10	.07	.12	.13	1.9	4.0	1.3	.15	.12	.12
24	.09	.12	.11	.06	.13	.12	1.8	4.2	1.1	.15	.11	.11
25	.22	.11	.10	.05	.13	.12	1.8	4.8	.97	.14	.10	.11
26	.18	.11	.09	.05	.13	.14	1.8	4.9	.97	.15	.10	.11
27	.16	.12	.08	.06	.13	.16	1.8	5.4	.96	.15	.11	.11
28	.14	.11	.09	.08	.13	.19	1.8	5.5	1.3	.13	.09	.11
29	.13	.10	.10	.09	.13	.17	1.7	5.8	1.3	.13	.08	.12
30	.14	.11	.09	.10	---	.16	1.8	5.7	.99	.12	.09	.12
31	.17	---	.10	.11	---	.16	---	5.0	---	.12	.11	---
TOTAL	3.45	4.14	3.05	2.41	3.03	4.22	27.29	192.2	62.59	10.06	3.36	3.41
MEAN	.11	.14	.098	.078	.10	.14	.91	6.20	2.09	.32	.11	.11
MAX	.22	.24	.12	.11	.13	.19	1.9	16	4.1	.82	.12	.14
MIN	.05	.08	.07	.05	.07	.12	.16	2.5	.96	.12	.08	.06
AC-FT	6.8	8.2	6.0	4.8	6.0	8.4	54	381	124	20	6.7	6.8

CAL YR 1987 TOTAL 230.63 MEAN .63 MAX 9.9 MIN .04 AC-FT 457
WTR YR 1988 TOTAL 319.21 MEAN .87 MAX 16 MIN .05 AC-FT 633

09058800 EAST MEADOW CREEK NEAR MINTURN, CO

LOCATION.--Lat 39°43'54", long 106°25'34", Eagle County, Hydrologic Unit 14010001, on left bank 1.4 mi upstream from mouth and 10 mi north of Minturn.

DRAINAGE AREA.--3.61 mi².

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 9,455 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 10 to Apr. 11. Records good except for estimated daily discharges, which are poor. No regulation or diversion upstream from station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--24 years, 4.48 ft³/s; 3,250 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 81 ft³/s, June 30, 1984, gage height, 1.71 ft, but may have been higher during period of no gage height record May 11 to June 26, 1984; maximum gage height, 2.22 ft, May 12, 1970 (backwater from ice); minimum daily discharge, 0.32 ft³/s, Jan. 7, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 30 ft³/s at 1830 June 7, gage height, 1.43 ft; minimum daily, 0.58 ft³/s, Jan. 26, 27.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.73	1.2	.83	.76	.68	.66	.96	3.8	12	5.4	1.8	1.3
2	.65	1.4	.84	.71	.66	.68	.97	2.3	13	4.9	1.7	1.1
3	.65	1.2	.87	.67	.66	.68	.95	2.0	17	4.6	1.6	1.0
4	.72	1.0	.84	.66	.73	.66	.93	1.8	20	4.4	1.4	.94
5	.65	1.0	.82	.68	.68	.68	.88	2.0	22	4.3	1.4	.87
6	.65	1.1	.82	.73	.66	.70	1.1	2.5	22	5.0	1.3	.80
7	.59	1.1	.82	.73	.66	.73	1.3	2.0	22	4.1	1.4	.90
8	.65	1.3	.82	.73	.66	.74	1.5	2.0	23	3.7	1.4	.80
9	.65	1.3	.80	.73	.64	.78	1.4	1.8	22	3.5	1.4	.85
10	.65	1.3	.80	.73	.64	.72	1.2	1.8	22	3.3	1.3	.90
11	.65	1.2	.82	.75	.64	.75	1.4	3.2	21	3.6	1.2	1.2
12	.72	1.0	.84	.73	.64	.73	1.6	4.3	19	3.5	1.2	1.3
13	.80	1.0	.82	.69	.64	.72	1.7	7.4	17	3.0	1.1	1.4
14	1.0	1.1	.78	.69	.64	.74	2.0	10	16	2.8	1.0	1.4
15	1.0	1.0	.77	.70	.64	.72	1.8	12	15	2.7	1.0	1.4
16	1.0	1.0	.78	.72	.62	.72	1.8	13	15	2.7	1.5	1.1
17	1.0	.96	.81	.72	.64	.74	2.2	14	15	2.4	1.4	.98
18	.87	.91	.80	.72	.66	.74	1.7	16	14	2.4	1.4	.94
19	.87	.91	.80	.72	.66	.85	2.0	15	16	2.3	1.2	.94
20	.87	.95	.80	.72	.66	.80	2.1	11	14	2.3	1.1	.94
21	1.2	1.0	.80	.69	.64	.80	2.4	8.5	13	2.1	1.2	.94
22	1.3	1.1	.78	.67	.64	.80	1.8	6.8	12	1.9	1.3	.94
23	1.2	1.2	.78	.67	.63	.80	1.5	6.4	11	1.9	1.1	.94
24	.94	1.2	.78	.67	.70	.80	1.4	8.8	10	1.8	1.1	.94
25	1.0	1.2	.72	.62	.72	.80	1.3	10	9.3	1.8	1.0	.87
26	1.0	.99	.72	.58	.72	.84	1.3	12	8.7	1.9	.98	.87
27	.87	.94	.74	.58	.68	.90	1.3	13	8.0	1.9	1.0	.85
28	.94	.91	.76	.60	.66	.96	1.2	15	8.9	1.8	1.0	.80
29	.94	.88	.76	.66	.66	1.2	1.3	18	8.9	1.9	1.0	.87
30	1.0	.83	.76	.70	---	1.2	2.2	17	6.5	1.9	.94	.87
31	1.0	---	.76	.70	---	1.1	---	15	---	1.8	1.0	---
TOTAL	26.76	32.18	24.64	21.30	19.13	24.54	45.02	256.3	456.3	92.2	38.42	29.15
MEAN	.86	1.07	.79	.69	.66	.79	1.50	8.27	15.2	2.97	1.24	.97
MAX	1.3	1.4	.87	.76	.72	1.2	2.4	18	23	5.4	1.8	1.4
MIN	.59	.83	.72	.58	.62	.66	.88	1.8	6.5	1.8	.94	.80
AC-FT	53	64	49	42	38	49	89	508	905	183	76	58

CAL YR 1987 TOTAL 1202.49 MEAN 3.29 MAX 27 MIN .42 AC-FT 2390
WTR YR 1988 TOTAL 1065.94 MEAN 2.91 MAX 23 MIN .58 AC-FT 2110

09059500 PINEY RIVER NEAR STATE BRIDGE, CO

LOCATION.--Lat 39°48'00", long 106°35'00", in SW¼NE¼ sec.16, T.3 S., R.82 W., Eagle County, Hydrologic Unit 14010001, on left bank at downstream side of private bridge at Perry Olsen Ranch 1.2 mi downstream from Rock Creek, and 6.0 mi southeast of State Bridge.

DRAINAGE AREA.--86.2 mi².

PERIOD OF RECORD.--May 1944 to current year.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 7,272.35 ft above National Geodetic Vertical Datum of 1929. Prior to July 29, 1944, nonrecording gage, and July 29, 1944, to Oct. 24, 1947, water-stage recorder, at datum 2.38 ft, higher.

REMARKS.--Estimated daily discharges: Nov. 17 to Dec. 10, Dec. 12 to Jan. 11, 13-16, Feb. 4-8, 17-20, 24-27, Mar. 5, 8, 9, 12-14, and Mar. 17-19. Records good except for estimated daily discharges, which are poor. Diversions upstream from station for irrigation of about 400 acres of hay meadows upstream and downstream from station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--44 years, 76.7 ft³/s; 55,570 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 1,300 ft³/s, May 25, 1984 (occured during a period of no gage-height record); maximum recorded discharge, 1,220 ft³/s, June 27, 1983, gage height, 5.82 ft, (from peak stage indicator), but may have been higher May 25, 1984; minimum daily, 1.9 ft³/s, Sept. 1, 18, 19, 1954.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 520 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
June 5	0345	*487	*4.90				

Minimum daily, 9.0 ft³/s, Sept. 9.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	19	14	15	14	13	19	132	212	112	21	11
2	13	23	14	14	13	13	18	107	208	98	21	11
3	13	22	16	14	13	13	19	88	285	89	20	10
4	13	20	16	14	12	12	20	83	384	80	18	9.5
5	13	17	16	15	12	12	20	96	424	78	18	9.4
6	13	18	16	15	12	13	22	111	410	80	17	9.4
7	13	19	15	15	12	13	32	90	411	71	17	9.3
8	13	19	14	16	12	12	40	86	394	65	18	9.4
9	13	16	14	15	13	12	33	73	377	59	17	9.0
10	13	18	15	15	13	13	32	70	345	50	16	9.1
11	13	17	16	15	13	13	34	76	342	46	15	11
12	13	17	14	15	13	13	46	115	287	48	15	14
13	13	17	14	14	13	13	67	167	261	44	15	18
14	16	17	14	14	13	13	82	238	220	42	14	20
15	17	16	14	15	13	14	87	283	215	40	14	17
16	18	15	14	15	13	14	89	310	214	39	15	16
17	17	15	14	16	13	14	98	318	218	35	16	13
18	16	15	15	16	13	13	93	329	211	35	16	13
19	15	15	17	15	12	13	104	328	250	33	15	13
20	13	15	16	14	12	14	107	229	248	32	15	12
21	13	16	16	17	13	15	120	181	218	29	14	12
22	13	17	15	16	13	15	96	152	213	27	16	12
23	13	17	16	16	12	15	80	140	187	26	14	12
24	14	16	16	16	11	14	68	152	186	25	13	12
25	19	16	15	16	11	13	61	194	172	23	13	12
26	18	16	15	16	12	15	56	218	165	23	12	12
27	17	16	15	16	12	19	53	253	147	24	13	12
28	15	15	16	16	13	20	55	277	165	22	13	12
29	16	15	16	15	13	22	71	324	200	23	13	12
30	17	15	15	15	---	18	99	334	139	22	12	12
31	18	---	16	14	---	17	---	236	---	21	12	---
TOTAL	454	509	469	470	364	443	1820	5790	7708	1441	478	364.1
MEAN	14.6	17.0	15.1	15.2	12.6	14.3	60.7	187	257	46.5	15.4	12.1
MAX	19	23	17	17	14	22	120	334	424	112	21	20
MIN	13	15	14	14	11	12	18	70	139	21	12	9.0
AC-FT	901	1010	930	932	722	879	3610	11480	15290	2860	948	722

CAL YR 1987 TOTAL 20991 MEAN 57.5 MAX 472 MIN 12 AC-FT 41640
WTR YR 1988 TOTAL 20310.1 MEAN 55.5 MAX 424 MIN 9.0 AC-FT 40290

09060550 ROCK CREEK AT CRATER, CO

LOCATION.--Lat 39°58'42", long 106°42'34", in NW¼NE¼ sec. 17, T.1 S., R.83 W., Routt County, Hydrologic Unit 14010001, on right bank 250 ft downstream from county bridge crossing, 2 miles downstream from Kayser Mutual Ditch diversion and 0.8 miles northwest of Crater, Colorado.

DRAINAGE AREA.--72.6 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1984 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 7,185 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records good. Diversions for irrigation of approximately 1,025 acres upstream from station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge recorded, 422 ft³/s, May 6, 1985, gage height, 3.97 ft, but may have been higher during period of no gage-height record May 7-14, 1985; minimum daily, 3.5 ft³/s, Aug. 7, 8, 1988.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 268 ft³/s at 2400 May 18, gage height, 3.62 ft; minimum daily, 3.5 ft³/s, Aug. 7, 8.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.7	9.3	7.8	9.3	9.3	9.4	12	157	161	17	4.7	4.3
2	4.7	17	7.8	9.3	9.3	9.6	12	111	159	15	4.2	4.2
3	6.2	18	8.2	9.3	9.3	9.6	12	83	165	15	3.8	4.3
4	9.0	15	8.6	9.3	9.4	9.6	11	107	163	17	3.7	4.3
5	7.3	14	8.7	9.3	9.4	9.8	11	132	164	16	3.7	4.2
6	4.8	14	9.0	9.5	9.3	9.8	12	129	152	14	3.7	4.1
7	4.8	14	9.4	9.6	9.3	9.8	14	95	132	15	3.5	4.1
8	4.8	13	9.4	9.6	9.3	9.7	15	92	114	13	3.5	3.9
9	4.9	9.9	9.3	9.6	9.3	9.8	15	84	102	11	3.6	4.0
10	4.9	9.8	9.3	9.6	9.3	9.9	15	91	96	10	3.6	4.0
11	4.9	12	9.3	9.3	9.3	9.7	15	106	89	11	3.6	4.1
12	5.0	9.7	9.2	8.5	9.2	9.5	19	141	83	11	3.6	11
13	5.2	12	8.4	9.3	8.9	9.3	26	168	72	8.5	3.7	16
14	6.3	12	8.5	9.6	8.8	9.0	33	195	68	7.6	3.8	10
15	6.7	10	7.4	9.8	8.8	9.0	45	215	60	6.9	3.8	5.9
16	7.1	7.3	7.7	10	8.8	9.0	56	225	55	6.9	3.8	5.1
17	7.1	9.2	7.7	10	9.2	9.0	69	238	47	6.6	3.7	4.7
18	6.2	7.0	8.0	10	9.2	8.9	77	244	46	6.0	3.8	4.3
19	5.5	7.8	8.4	10	9.3	8.9	84	250	42	5.4	3.8	4.2
20	5.3	9.3	8.6	9.6	9.3	9.0	96	208	38	4.6	3.8	4.1
21	4.7	9.9	8.8	9.6	9.3	9.8	95	176	35	4.5	4.0	4.1
22	4.5	10	8.8	9.5	9.3	10	70	154	33	4.2	4.8	4.3
23	4.5	11	8.8	9.3	9.2	11	56	138	34	4.1	4.8	4.3
24	4.8	10	8.8	9.3	9.0	11	48	156	26	4.0	4.2	4.3
25	8.4	9.9	9.1	9.3	9.0	10	45	166	24	3.7	4.0	4.3
26	8.3	10	9.3	9.3	9.0	11	38	158	21	3.7	4.0	4.3
27	6.3	9.5	9.3	9.3	9.0	13	44	177	22	3.7	4.0	4.3
28	5.7	8.8	9.3	9.3	9.0	12	60	191	23	3.8	4.0	4.3
29	5.2	8.6	9.3	9.3	9.1	12	89	196	24	4.1	4.0	4.4
30	5.6	8.2	9.3	9.3	---	12	142	197	20	4.1	4.0	4.6
31	7.0	---	9.3	9.3	---	12	---	175	---	4.9	4.1	---
TOTAL	180.4	326.2	270.8	293.3	265.9	312.1	1336	4955	2270	262.3	121.3	154.0
MEAN	5.82	10.9	8.74	9.46	9.17	10.1	44.5	160	75.7	8.46	3.91	5.13
MAX	9.0	18	9.4	10	9.4	13	142	250	165	17	4.8	16
MIN	4.5	7.0	7.4	8.5	8.8	8.9	11	83	20	3.7	3.5	3.9
AC-FT	358	647	537	582	527	619	2650	9830	4500	520	241	305

CAL YR 1987 TOTAL 9234.2 MEAN 25.3 MAX 186 MIN 4.4 AC-FT 18320
WTR YR 1988 TOTAL 10747.3 MEAN 29.4 MAX 250 MIN 3.5 AC-FT 21320

09060550 ROCK CREEK AT CRATER, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 1984 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1986 to September 1987.
WATER TEMPERATURES: April 1986 to September 1987.

INSTRUMENTATION.--Water-quality monitor since April 1986.

REMARKS.--Daily maximum and minimum specific-conductance data available in district office. Water-quality monitor was not operated during winter.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 187 microsiemens Aug.28, 1986; minimum, 46 microsiemens several days during May and June, 1986.
WATER TEMPERATURE: Maximum, 18.9°C July 26,1987; minimum, 0.0°C many days during winter months.

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	TUR-BID-ITY (FTU)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS-SOLVED (MG/L AS CA)
OCT										
[illegible]...	1240	[illegible]	159	8.1	6.0	0.40	10.2	76	4	23
NOV										
15...	[illegible]	17	119	7.9	4.0	2.0	--	58	4	17
JAN										
12...	[illegible]	[illegible]	[illegible]	7.6	0.5	0.70	--	68	6	20
MAR										
29...	1440	17	137	7.4	1.5	2.6	10.5	65	3	19
APR										
21...	1345	67	86	[illegible]	7.0	4.1	11.0	42	2	12
MAY										
12...	1440	137	81	7.7	7.5	[illegible]	9.5	34	0	9.9
JUN										
02...	[illegible]	147	45	8.1	6.5	2.9	[illegible]	22	0	6.7
JUL										
[illegible]...	[illegible]	[illegible]	127	7.9	10.5	1.4	8.1	57	6	17
AUG										
29...	1040	3.5	176	8.1	10.5	1.3	7.6	74	1	22
SEP										
13...	1315	19	127	8.1	8.5	7.0	10.1	59	3	17

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
OCT										
[illegible]...	4.6	4.5	0.2	1.1	72	12	0.50	0.20	11	100
NOV										
15...	3.8	3.7	0.2	1.1	54	11	0.90	0.10	[illegible]	83
JAN										
12...	4.3	[illegible]	0.2	1.0	62	11	1.2	0.20	14	93
MAR										
29...	4.3	4.2	0.2	1.2	62	13	1.2	0.20	14	94
APR										
21...	2.9	2.7	0.2	1.6	40	14	1.0	0.10	11	70
MAY										
12...	2.2	2.5	0.2	0.90	38	13	0.70	0.10	12	65
JUN										
02...	1.4	2.3	0.2	0.60	23	6.7	0.60	0.20	10	42
JUL										
[illegible]...	3.6	4.4	0.3	1.2	51	11	0.40	0.10	12	80
AUG										
29...	4.6	3.7	0.2	1.0	75	11	0.40	0.20	11	98
SEP										
13...	3.9	4.0	0.2	1.0	56	9.7	0.90	0.10	11	81

09060550 ROCK CREEK AT CRATER, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)
OCT 14...	0.13	1.65	--	<0.10	--	<0.01	--	--	--	<0.20
NOV 03...	0.11	3.72	--	<0.10	--	0.03	--	--	--	<0.20
JAN 12...	0.13	2.13	--	0.10	--	<0.01	--	--	--	<0.20
MAR 29...	0.12	4.18	--	0.10	--	0.03	--	0.47	--	0.50
APR 20...	0.10	14.0	--	0.10	--	0.02	--	0.38	--	0.40
MAY 12...	0.08	17.6	<0.01	<0.10	<0.10	0.04	0.05	0.46	0.25	0.50
JUN 02...	0.07	19.8	--	--	--	--	--	--	--	--
JUL 12...	0.12	2.39	--	<0.10	--	0.01	--	--	--	<0.20
AUG 09...	0.14	0.95	<0.01	<0.10	<0.10	0.02	0.04	--	--	<0.20
SEP 13...	0.11	4.31	--	0.10	--	<0.01	--	--	--	0.30

DATE	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHOROUS TOTAL (MG/L AS P)	PHOS- PHOROUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)	PHOS- PHOROUS ORTHO, DIS- SOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	IRON, DIS- SOLVED (UG/L AS FE)
OCT 14...	--	--	<0.01	--	<0.01	--	--	--	26
NOV 03...	--	--	0.01	--	0.02	--	2.9	3.2	140
JAN 12...	--	--	0.02	--	0.01	--	--	--	110
MAR 29...	--	0.60	0.05	--	0.01	--	--	--	130
APR 20...	--	0.50	0.05	--	<0.01	--	7.7	7.5	240
MAY 12...	0.30	--	0.05	0.04	--	--	7.4	6.1	170
JUN 02...	--	--	--	--	--	--	--	--	130
JUL 12...	--	--	0.02	--	0.01	--	--	--	46
AUG 09...	<0.20	--	0.03	0.05	0.01	0.02	2.5	2.5	9
SEP 13...	--	0.40	0.04	--	0.01	--	3.4	2.9	130

09060550 ROCK CREEK AT CRATER, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE)	BORON, DIS- SOLVED (UG/L AS B)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)
MAY											
12...	1440	630	1	<1	<100	33	<10	<10	<1	<1	2
AUG											
09...	1040	70	<1	1	<100	65	<10	<10	2	<1	<1

DATE	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV- ERABLE (UG/L AS CO)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER, DIS- SOLVED (UG/L AS CU)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM TOTAL RECOV- ERABLE (UG/L AS LI)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY DIS- SOLVED (UG/L AS HG)
MAY											
12...	1	1	4	1	<5	<5	<10	30	6	--	--
AUG											
09...	<1	<1	3	2	<5	<5	<10	<10	2	<0.10	<0.1

DATE	MOLYB- DENUM, TOTAL RECOV- ERABLE (UG/L AS MO)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, TOTAL (UG/L AS SE)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)
MAY											
12...	5	<2	6	5	<1	<1	<1	<1.0	63	10	4
AUG											
09...	1	<1	<1	<1	<1	<1	<1	<1.0	110	<10	12

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT					
14...	1240	6.3	11	0.19	55
NOV					
03...	1115	17	7	0.32	71
MAR					
29...	1440	17	23	1.1	80
APR					
20...	1040	68	21	3.9	76
21...	0855	98	22	5.8	72
MAY					
11...	1510	74	18	3.6	88
12...	1440	107	26	7.5	55
13...	0910	140	19	7.2	70
JUN					
01...	1435	130	9	3.2	56
02...	1100	147	12	4.8	75
JUL					
12...	1100	10	1	0.03	67
13...	0855	8.0	8	0.17	37
AUG					
09...	1040	3.5	10	0.09	47
SEP					
13...	0940	19	17	0.87	69
14...	0845	11	14	0.42	49

09060770 ROCK CREEK AT McCOY, CO

LOCATION.--Lat 39°54'44", long 106°43'30", in SE¼NE¼ sec.6, T.2 S., R.83 W., Eagle County, Hydrologic Unit 14010001, on right bank 1,900 ft downstream from bridge on State Highway 131 and 0.25 mi south of McCoy.

DRAINAGE AREA.--198 mi².

PERIOD OF RECORD.--October 1982 to September 1983 (measurements only), October 1983 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,660 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 18-22, 25, 26, Nov. 28 to Dec. 4, Dec. 6, 7, 9, 12, Dec. 14 to Feb. 27, Mar. 5, 6, 8, 9, 11-24, 26, 27, 29, 31, and Apr. 1, 2. Records good except for estimated daily discharges, which are fair. Diversions for irrigation of approximately 5,000 acres upstream from station. Several observations of specific conductance and water temperature were obtained and published elsewhere in this report.

AVERAGE DISCHARGE.--5 years, 89.5 ft³/s; 64,840 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,760 ft³/s, May 16, 1984, gage height, 4.74 ft, (outside highwater mark); minimum daily, 4.7 ft³/s, Sept. 9, 1988.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 450 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
May 19	0800	*470	*2.45				

Minimum daily discharge, 4.7 ft³/s, Sept. 9.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	29	25	20	23	24	27	328	208	30	11	6.5
2	15	37	23	20	23	25	27	240	193	27	11	7.4
3	17	39	24	20	23	24	29	179	184	29	12	7.7
4	22	34	24	20	23	23	30	188	184	29	14	7.1
5	21	33	25	20	23	23	32	216	187	27	13	6.2
6	17	31	25	20	23	23	34	243	184	23	12	5.9
7	18	32	25	21	22	23	44	169	157	21	12	5.9
8	18	32	25	21	23	23	63	163	136	19	13	4.8
9	19	27	25	20	22	23	77	154	118	18	12	4.7
10	19	26	25	20	23	23	91	153	108	17	11	5.3
11	19	28	24	20	23	23	88	163	98	17	11	7.8
12	19	26	23	19	23	23	111	233	90	15	11	20
13	19	27	22	20	23	23	180	295	77	13	10	34
14	20	33	21	22	22	22	253	368	76	11	10	26
15	21	28	19	23	22	21	294	405	70	9.6	9.6	18
16	24	22	17	23	22	21	254	412	65	12	9.6	14
17	25	25	17	23	23	21	349	426	61	13	11	13
18	23	23	18	24	23	21	283	446	59	12	12	12
19	21	23	18	23	23	21	286	457	52	10	11	12
20	20	25	18	23	23	21	280	395	48	8.8	11	12
21	19	26	19	23	23	21	270	288	43	9.2	11	14
22	19	27	19	23	23	22	180	240	44	9.2	13	14
23	20	28	19	23	23	23	135	217	48	8.4	12	14
24	21	28	19	23	22	24	119	217	41	8.8	12	15
25	27	28	19	23	22	25	110	227	38	7.7	11	15
26	30	28	19	23	23	24	106	220	36	6.2	10	14
27	26	28	20	23	23	26	117	241	39	6.8	11	14
28	24	28	20	23	23	27	126	251	48	7.1	11	14
29	22	27	20	23	24	32	155	256	39	12	8.5	15
30	23	26	20	22	---	28	239	265	35	14	7.4	15
31	28	---	20	23	---	28	---	231	---	12	7.1	---
TOTAL	651	854	657	674	661	731	4389	8286	2766	462.8	341.2	374.3
MEAN	21.0	28.5	21.2	21.7	22.8	23.6	146	267	92.2	14.9	11.0	12.5
MAX	30	39	25	24	24	32	349	457	208	30	14	34
MIN	14	22	17	19	22	21	27	153	35	6.2	7.1	4.7
AC-FT	1290	1690	1300	1340	1310	1450	8710	16440	5490	918	677	742

CAL YR 1987 TOTAL 19494.8 MEAN 53.4 MAX 388 MIN 7.4 AC-FT 38670
WTR YR 1988 TOTAL 20846.3 MEAN 57.0 MAX 457 MIN 4.7 AC-FT 41350

09060770 ROCK CREEK AT MCCOY, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.-- December 1984 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	TUR-BID-ITY (FTU)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS-SOLVED (MG/L AS CA)
OCT										
14...	1250	21	377	8.5	7.5	1.3	10.3	160	4	44
NOV										
03...	1415	40	326	8.5	8.0	2.2	--	160	27	44
JAN										
12...	1130	19	357	7.8	0.0	1.5	--	160	15	45
MAR										
29...	1110	38	372	8.0	0.0	3.1	11.1	160	21	44
APR										
20...	1510	228	228	7.9	6.0	19	10.0	110	17	32
MAY										
12...	1050	226	185	7.9	5.0	20	10.1	100	20	30
JUN										
02...	1430	170	141	7.9	12.0	7.4	9.6	67	3	19
JUL										
12...	1350	15	344	8.4	18.0	1.2	8.3	150	2	41
AUG										
09...	1430	12	376	8.3	18.5	1.1	8.1	160	7	41
SEP										
13...	1400	41	353	8.2	10.0	7.8	9.2	150	18	39

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
OCT										
14...	12	11	0.4	3.7	156	41	2.4	0.30	12	220
NOV										
03...	12	9.7	0.3	3.2	133	42	2.3	0.20	14	207
JAN										
12...	12	11	0.4	4.1	147	35	3.9	0.30	16	215
MAR										
29...	12	11	0.4	4.1	139	37	3.3	0.20	15	210
APR										
20...	7.7	5.3	0.2	2.9	95	33	1.8	0.10	11	151
MAY										
12...	6.9	5.2	0.2	1.6	84	25	1.5	0.20	12	133
JUN										
02...	4.7	4.7	0.3	1.2	64	16	1.0	0.20	12	97
JUL										
12...	12	12	0.4	3.7	150	39	1.8	0.20	12	212
AUG										
09...	14	13	0.5	4.7	154	42	1.8	0.20	13	223
SEP										
13...	12	11	0.4	3.2	129	42	2.3	0.20	13	200

09060770 ROCK CREEK AT MCCOY, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)
OCT									
14...	0.30	12.6	--	<0.10	--	<0.01	--	--	0.20
NOV									
03...	0.27	21.8	--	<0.10	--	0.02	--	--	<0.20
JAN									
12...	0.29	11.3	--	0.30	--	0.02	--	--	<0.20
MAR									
29...	0.29	22.0	--	0.20	--	0.03	--	0.47	0.50
APR									
20...	0.22	101	--	<0.10	--	0.03	--	0.57	0.60
MAY									
12...	0.19	86.6	<0.01	<0.10	<0.10	0.02	<0.01	0.48	0.50
JUN									
02...	0.14	45.9	--	<0.10	--	0.02	--	0.38	0.40
JUL									
12...	0.30	9.06	--	<0.10	--	0.02	--	--	<0.20
AUG									
09...	0.31	7.42	<0.01	<0.10	<0.10	0.01	0.02	--	<0.20
SEP									
13...	0.29	23.2	--	<0.10	--	<0.01	--	--	0.30

DATE	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHOROUS TOTAL (MG/L AS P)	PHOS- PHOROUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)	PHOS- PHOROUS ORTHO, DIS- SOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	IRON, DIS- SOLVED (UG/L AS FE)
OCT									
14...	--	--	<0.01	--	<0.01	--	--	--	17
NOV									
03...	--	--	0.03	--	0.03	--	4.4	4.2	36
JAN									
12...	--	--	0.02	--	0.01	--	--	--	26
MAR									
29...	--	0.70	0.04	--	0.01	--	--	--	69
APR									
20...	--	--	0.07	--	0.02	--	9.1	6.9	220
MAY									
12...	0.30	--	0.06	0.02	0.02	0.01	9.0	6.1	--
JUN									
02...	--	--	0.02	--	<0.01	--	--	--	92
JUL									
12...	--	--	0.02	--	<0.01	--	--	--	14
AUG									
09...	<0.20	--	0.02	0.02	<0.01	<0.01	4.4	4.3	24
SEP									
13...	--	--	0.08	--	<0.01	--	6.9	3.7	47

DATE	TIME	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE)	BORON, DIS- SOLVED (UG/L AS B)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)
MAY											
12...	1050	880	1	--	100	--	<10	10	<1	--	1
AUG											
09...	1430	60	2	2	<100	84	<10	40	1	1	<1

DATE	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV- ERABLE (UG/L AS CO)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER, DIS- SOLVED (UG/L AS CU)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM TOTAL RECOV- ERABLE (UG/L AS LI)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY DIS- SOLVED (UG/L AS HG)
MAY											
12...	--	1	6	--	<5	--	<10	60	--	--	--
AUG											
09...	<1	2	2	1	<5	<5	20	30	15	<0.10	<0.1

09060770 ROCK CREEK AT MCCOY, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	MOLYB- DENUM, TOTAL RECOV- ERABLE (UG/L AS MO)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, TOTAL (UG/L AS SE)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)
MAY											
12...	4	2	9	5	<1	--	<1	--	190	10	--
AUG											
09...	3	3	<1	2	<1	<1	<1	2.0	320	<10	31

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT					
14...	1250	21	12	0.68	60
NOV					
03...	1415	40	5	0.54	62
MAR					
29...	1110	38	19	1.9	67
APR					
20...	1510	228	57	35	89
21...	1030	240	73	47	90
MAY					
11...	1345	155	18	7.5	90
12...	1050	226	48	29	85
13...	1040	270	67	49	91
JUN					
01...	1535	170	17	7.8	68
02...	1430	170	26	12	72
JUL					
12...	1350	15	21	0.87	73
13...	0955	14	4	0.15	58
AUG					
09...	1430	12	5	0.16	53
SEP					
13...	1400	41	87	9.6	84
14...	0945	26	33	2.3	64

EAGLE RIVER BASIN

09063000 EAGLE RIVER AT RED CLIFF, CO

LOCATION.--Lat 39°30'30", long 106°21'58", in NW¼SW¼ sec.20, T.6 S., R.80 W., Eagle County, Hydrologic Unit 14010003, on left bank at Red Cliff, 0.3 mi upstream from Turkey Creek.

DRAINAGE AREA.--70.0 mi².

PERIOD OF RECORD.--October 1910 to September 1925, May 1944 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 2124: Drainage area. WRD Colo. 1972: 1971.

GAGE.--Water-stage recorder. Datum of gage is 8,653.79 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation). Jan. 8, 1911, to Sept. 30, 1925, nonrecording gage at bridge 0.2 mi downstream at different datum. May 25, 1944, to Oct. 12, 1952, water-stage recorder at site 200 ft upstream at datum 1.46 ft, lower. Prior to May 6, 1982, at site 250 ft downstream at datum 5.00 ft, lower.

REMARKS.--Estimated daily discharges: Nov. 17 to Dec. 5, Dec. 8-10, 12-20, 22-23, 25, Jan. 2-7, 12-21, Feb. 3-15, 17-27, 29, Mar. 1, 4, 5, and Mar. 12-16. Records good except for estimated daily discharges, which are poor. Transmountain diversions upstream from station by Columbine, Ewing, and Wurtz ditches. Transbasin diversion upstream from station from Robinson Reservoir, capacity, 2,520 acre-ft to Tenmile Creek for mining development. Small diversions for irrigation of 400 acres upstream from station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--59 years (water years 1911-25, 1945-88), 48.0 ft³/s; 34,780 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 1,010 ft³/s, June 5, 1912, gage height, 4.0 ft, site and datum then in use, from rating curve extended above 500 ft³/s; maximum gage height recorded, 6.43 ft, May 24, 1984; minimum daily discharge, 1.0 ft³/s, Oct. 1, 5, 1917.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 280 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
June 5	2330	*170	*4.21				

Minimum daily, 5.5 ft³/s, Feb. 2-4, Mar. 2, 3.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	15	12	9.2	6.6	6.0	14	62	104	55	21	12
2	12	15	11	9.0	5.5	5.5	9.3	48	104	50	19	12
3	12	16	11	7.0	5.5	5.5	9.2	41	121	50	18	12
4	11	14	11	7.8	5.5	6.8	9.4	47	134	48	17	13
5	12	15	11	8.0	5.6	7.2	10	54	147	45	15	12
6	12	15	11	7.8	6.6	7.6	11	57	155	44	19	12
7	11	15	11	7.5	7.0	7.7	16	46	151	42	19	11
8	11	15	11	7.0	7.6	8.3	19	45	147	40	19	11
9	11	13	15	7.0	7.2	9.0	18	43	144	37	17	11
10	11	14	12	7.0	7.6	12	19	47	151	36	15	11
11	11	15	11	7.6	7.0	11	17	44	142	35	15	12
12	11	14	9.6	7.6	7.0	10	20	54	133	33	16	14
13	11	14	8.8	6.8	7.0	9.4	25	70	125	31	16	16
14	13	15	8.2	7.4	7.0	10	28	86	117	32	14	15
15	14	15	8.2	8.0	6.8	13	30	97	104	31	13	15
16	13	14	8.4	8.2	6.9	12	34	108	97	30	13	13
17	12	12	9.2	8.2	7.5	11	38	110	92	30	16	13
18	12	11	9.6	8.0	7.0	14	32	108	87	28	15	12
19	12	11	11	7.9	6.6	13	34	117	86	26	13	12
20	11	12	10	7.0	7.5	11	39	102	96	24	13	12
21	12	14	9.7	7.4	6.8	10	45	84	87	22	12	12
22	13	14	9.5	8.1	6.4	9.8	38	73	82	21	15	12
23	13	15	8.8	9.0	6.4	7.1	31	68	77	20	13	13
24	14	15	8.5	9.1	6.4	7.0	27	67	74	20	12	12
25	13	14	8.0	8.8	6.4	6.8	26	70	71	22	12	12
26	14	13	8.7	9.7	6.5	7.6	27	76	68	19	12	12
27	13	13	8.6	10	6.5	9.1	26	90	66	19	14	12
28	13	13	9.0	9.8	6.6	8.7	28	101	65	19	12	12
29	14	12	9.1	9.4	6.0	14	34	115	67	23	12	12
30	14	12	9.5	8.6	---	8.1	52	124	61	22	11	12
31	15	---	9.5	8.2	---	9.4	---	111	---	22	11	---
TOTAL	383	415	308.9	252.1	193.0	287.6	765.9	2365	3155	976	459	372
MEAN	12.4	13.8	9.96	8.13	6.66	9.28	25.5	76.3	105	31.5	14.8	12.4
MAX	15	16	15	10	7.6	14	52	124	155	55	21	16
MIN	11	11	8.0	6.8	5.5	5.5	9.2	41	61	19	11	11
AC-FT	760	823	613	500	383	570	1520	4690	6260	1940	910	738

CAL YR 1987 TOTAL 12242.9 MEAN 33.5 MAX 230 MIN 8.0 AC-FT 24280
WTR YR 1988 TOTAL 9932.5 MEAN 27.1 MAX 155 MIN 5.5 AC-FT 19700

09063200 WEARYMAN CREEK NEAR RED CLIFF, CO

LOCATION.--Lat 39°31'14", long 106°19'06", in SW¼SE¼ sec.15, T.6 S., R.80 W., Eagle County, Hydrologic Unit 14010003, on left bank 0.4 mi upstream from mouth and 2.5 mi east of Red Cliff.

DRAINAGE AREA.--8.78 mi².

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 9,158 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 20-23, Nov. 9 to Apr. 14, and Apr. 30 to May 14. Records good except for estimated daily discharges, which are poor. No regulation or diversion upstream from station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--24 years, 8.73 ft³/s; 6,320 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 155 ft³/s, June 20, 1983, gage height, 3.61 ft; minimum daily, 0.30 ft³/s, Feb. 21, 1967.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 70 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
June 10	1930	*56	*2.63				

Minimum daily, 0.90 ft³/s, Jan. 14.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.3	2.2	1.7	1.6	1.7	2.0	2.1	4.3	20	16	6.3	2.7
2	3.2	2.2	1.6	1.2	1.6	2.1	1.9	3.8	16	15	5.8	2.8
3	3.2	2.2	1.9	1.2	1.5	2.0	1.8	3.2	19	14	5.4	2.6
4	2.9	2.0	1.8	1.4	1.5	1.8	1.8	3.5	21	14	5.3	2.5
5	2.9	1.8	1.7	1.6	1.3	1.6	2.0	4.1	25	13	5.0	2.5
6	2.9	2.1	1.7	1.7	1.4	1.8	1.8	4.3	29	13	5.0	2.7
7	2.7	2.0	1.6	1.7	1.5	1.6	1.6	3.7	31	12	4.9	2.7
8	2.6	1.8	1.6	1.7	1.6	1.5	1.6	3.9	37	12	4.6	2.6
9	2.6	1.6	1.6	1.5	1.6	1.6	1.8	3.9	42	11	4.5	2.7
10	2.4	1.6	1.7	1.4	1.5	1.7	1.9	4.2	50	10	4.2	2.4
11	2.1	1.8	1.8	1.4	1.5	1.7	1.8	4.2	49	10	4.2	2.6
12	2.3	1.8	1.7	1.3	1.6	1.6	1.6	4.7	42	10	4.4	2.9
13	2.3	1.8	1.4	.92	1.6	1.5	1.7	5.5	40	11	4.0	3.0
14	2.3	1.9	1.2	.90	1.6	1.5	1.8	6.4	33	11	3.8	2.9
15	2.9	1.9	1.0	1.0	1.5	1.7	2.2	7.9	31	10	3.8	2.7
16	2.7	1.8	1.1	1.3	1.5	1.7	2.4	9.4	30	9.8	4.1	2.6
17	2.1	1.7	1.3	1.5	1.4	1.6	2.6	10	30	9.4	4.1	2.5
18	1.8	1.7	1.6	1.4	1.4	1.6	2.2	11	28	9.2	4.0	2.1
19	1.8	1.7	1.6	1.5	1.5	1.7	2.2	12	28	8.7	3.9	2.0
20	1.7	1.8	1.7	1.2	1.7	1.8	2.5	11	28	8.3	3.8	1.9
21	1.7	2.0	1.5	1.1	1.6	1.7	2.9	10	27	7.8	4.0	1.9
22	1.8	2.1	1.3	1.4	1.5	1.5	2.6	10	26	7.4	3.9	2.0
23	2.1	2.1	1.5	1.5	1.5	1.4	2.6	10	25	7.1	3.5	1.9
24	2.2	2.0	1.7	1.5	1.5	1.4	2.6	10	24	6.9	3.4	1.9
25	2.2	1.8	1.6	1.4	1.6	1.4	2.6	11	23	6.7	3.2	1.9
26	1.9	1.7	1.4	1.3	1.7	1.6	2.4	12	22	7.1	3.7	1.9
27	2.0	1.8	1.4	1.5	1.7	1.8	2.2	13	21	6.7	3.8	1.8
28	2.3	1.7	1.6	1.5	2.0	1.8	2.3	14	20	6.6	3.3	1.7
29	2.2	1.6	1.6	1.6	2.0	2.1	2.6	16	19	6.6	3.1	1.6
30	2.3	1.8	1.4	1.7	---	1.8	3.5	18	18	6.3	3.0	1.6
31	2.2	---	1.6	1.7	---	1.9	---	19	---	6.6	2.9	---
TOTAL	74.1	56.0	47.9	43.62	45.6	52.5	65.6	264.0	854	303.2	128.9	69.6
MEAN	2.39	1.87	1.55	1.41	1.57	1.69	2.19	8.52	28.5	9.78	4.16	2.32
MAX	3.3	2.2	1.9	1.7	2.0	2.1	3.5	19	50	16	6.3	3.0
MIN	1.7	1.6	1.0	.90	1.3	1.4	1.6	3.2	16	6.3	2.9	1.6
AC-FT	147	111	95	87	90	104	130	524	1690	601	256	138

CAL YR 1987 TOTAL 2445.15 MEAN 6.70 MAX 43 MIN .95 AC-FT 4850
WTR YR 1988 TOTAL 2005.02 MEAN 5.48 MAX 50 MIN .90 AC-FT 3980

09063400 TURKEY CREEK NEAR RED CLIFF, CO

LOCATION.--Lat 39°31'22", long 106°20'08", in NW¼SW¼ sec.16, T.6 S., R.80 W., Eagle County, Hydrologic Unit 14010003, on right bank 400 ft downstream from Lime Creek, 1.9 mi northeast of Red Cliff, and 2.0 mi upstream from mouth.

DRAINAGE AREA.--23.8 mi^2 (revised).

PERIOD OF RECORD.--October 1963 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 8,918 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 10 to Apr. 14. Records good except for estimated daily discharges, which are poor. No diversion upstream from station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--25 years, 22.8 ft^3/s; 16,520 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 556 ft^3/s, June 8, 1985, gage height, 2.87 ft, from rating curve extended above 325 ft^3/s; maximum recorded gage height, 3.22 ft, June 24, 1983 (backwater from debris); minimum discharge, not determined.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 160 ft^3/s, and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov. 18	0600	---	*a2.67	June 8	2300	*164	2.40

Minimum daily discharge, 1.9 ft^3/s, Jan. 13, 14.
a Backwater from ice.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.9	4.8	3.1	3.0	3.2	4.0	6.8	13	65	39	17	6.0
2	5.7	4.9	2.9	2.5	2.9	4.1	6.8	12	64	37	15	5.9
3	5.7	4.6	3.2	2.5	2.8	3.9	6.5	12	74	36	14	5.7
4	5.7	4.5	3.2	2.8	2.6	3.5	7.2	12	84	34	14	5.5
5	5.7	4.3	3.1	3.1	2.6	3.2	7.2	13	97	32	13	5.5
6	5.6	4.6	3.0	3.3	2.7	3.6	6.7	16	96	30	13	5.4
7	5.4	4.6	3.0	3.3	2.9	3.3	6.2	15	91	28	13	5.2
8	5.5	4.5	3.0	3.2	3.0	3.1	5.6	15	97	27	13	5.0
9	5.1	3.5	3.2	3.0	3.0	3.2	6.2	15	140	26	12	4.9
10	4.6	3.4	3.4	2.8	2.9	3.4	7.2	16	136	25	11	5.1
11	4.6	3.3	3.5	2.5	2.9	3.3	6.4	16	138	24	11	5.6
12	4.6	3.5	3.4	2.2	3.0	3.2	6.0	20	118	23	11	6.0
13	4.7	3.2	2.9	1.9	3.0	3.1	6.4	28	111	22	11	5.8
14	5.3	3.2	2.6	1.9	3.0	3.2	7.2	36	109	21	9.8	5.7
15	5.2	3.0	2.3	2.2	2.8	3.5	7.1	43	96	21	9.5	5.4
16	5.0	2.8	2.5	2.6	2.7	3.7	7.6	48	87	20	10	5.2
17	4.7	2.7	2.8	2.9	2.7	3.7	8.4	52	87	19	9.7	5.3
18	4.7	2.7	3.2	2.9	2.7	3.4	7.9	54	89	18	9.2	5.2
19	4.6	2.7	3.2	2.9	2.9	3.8	8.1	55	93	18	8.7	5.0
20	4.3	2.8	3.3	2.6	3.1	4.3	8.5	48	94	17	8.3	4.9
21	4.2	3.0	3.1	2.3	2.9	4.0	9.4	41	88	17	8.8	4.8
22	4.5	3.2	2.8	2.7	2.9	4.0	9.3	36	84	16	8.5	5.0
23	4.6	3.2	3.1	2.9	2.9	4.4	9.1	35	75	16	7.7	4.9
24	4.8	3.1	3.3	2.9	3.1	4.4	8.6	34	69	16	7.4	4.8
25	5.1	3.0	3.0	2.7	3.2	4.7	8.2	36	64	16	7.0	4.7
26	4.8	2.8	2.8	2.7	3.5	4.9	9.0	40	59	16	7.3	4.7
27	4.7	3.0	2.8	3.0	3.8	5.4	7.8	46	53	16	7.5	4.6
28	4.5	3.0	3.1	3.1	4.0	6.0	7.8	52	51	16	6.6	4.6
29	4.7	2.9	3.2	3.2	4.0	7.0	8.5	61	47	15	6.4	4.6
30	4.9	3.1	3.0	3.3	---	6.6	10	71	41	15	6.3	4.6
31	4.8	---	3.2	3.3	---	7.3	---	70	---	18	5.9	---
TOTAL	154.2	103.9	94.2	86.2	87.7	129.2	227.7	1061	2597	694	312.6	155.6
MEAN	4.97	3.46	3.04	2.78	3.02	4.17	7.59	34.2	86.6	22.4	10.1	5.19
MAX	5.9	4.9	3.5	3.3	4.0	7.3	10	71	140	39	17	6.0
MIN	4.2	2.7	2.3	1.9	2.6	3.1	5.6	12	41	15	5.9	4.6
AC-FT	306	206	187	171	174	256	452	2100	5150	1380	620	309

CAL YR 1987 TOTAL 5788.2 MEAN 15.9 MAX 101 MIN 1.5 AC-FT 11480
WTR YR 1988 TOTAL 5703.3 MEAN 15.6 MAX 140 MIN 1.9 AC-FT 11310

09063900 MISSOURI CREEK NEAR GOLD PARK, CO

LOCATION.--Lat 39°23'25", long 106°28'10", Eagle County, Hydrologic Unit 14010003, on left bank 50 ft downstream from road culvert, 0.6 mi upstream from Fancy Creek, 2.2 mi southwest of Gold Park, and 10 mi southwest of Red Cliff.

DRAINAGE AREA.--6.39 mi² (revised).

PERIOD OF RECORD.--August 1972 to current year.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 9,980 ft, above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 8 to Apr. 16. Records good except for estimated daily discharges, which are poor. Transmountain diversion upstream from station to Arkansas River basin through Homestake tunnel. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--16 years, 8.45 ft³/s; 6,120 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 300 ft³/s, July 4, 1975, gage height, 3.19 ft, from rating curve extended above 35 ft³/s; maximum gage height, 3.83 ft, July 30, 1983; minimum daily discharge, 0.24 ft³/s, Feb. 12, 13, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 98 ft³/s at 2000 June 5, gage height, 2.86 ft; minimum daily, 0.55 ft³/s, Jan. 24-26.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	1.6	1.0	1.0	.86	1.1	2.2	8.3	16	11	12	1.6
2	1.3	1.7	1.2	.86	.80	1.0	1.8	7.2	15	10	9.2	1.6
3	1.2	1.7	1.2	.75	.76	.90	1.5	5.8	17	10	7.7	1.4
4	1.1	1.7	1.1	.84	.73	.83	1.5	5.0	29	10	6.8	1.3
5	1.1	1.6	1.2	.94	.70	.77	1.8	6.6	51	9.8	6.0	1.2
6	.97	1.6	1.2	.95	.76	.85	2.0	9.0	44	9.5	5.6	1.1
7	.97	1.7	1.1	.99	.84	.77	2.2	7.1	43	9.1	5.5	1.0
8	.90	1.7	1.1	.99	.84	.70	2.0	5.7	40	8.6	5.2	.82
9	.90	1.4	1.1	.90	.84	.70	2.3	4.9	42	8.3	4.4	.81
10	.82	1.2	1.2	.81	.77	.78	2.2	4.8	49	8.6	4.0	1.1
11	.82	1.3	1.2	.76	.76	.82	2.0	5.7	41	8.6	3.6	2.2
12	.82	1.2	1.0	.69	.83	.80	2.3	12	31	8.3	3.7	3.2
13	.85	1.2	.90	.60	.83	.75	2.8	24	27	8.8	3.2	4.3
14	1.2	1.3	.80	.60	.80	.75	3.5	37	17	11	2.9	4.2
15	1.5	1.3	.74	.66	.78	.84	3.9	50	16	14	2.9	3.7
16	1.4	1.2	.74	.80	.78	.90	4.3	49	18	13	3.6	3.2
17	1.4	1.0	.86	.88	.75	.86	5.9	32	17	12	3.6	2.8
18	1.2	1.0	1.0	.80	.75	.86	6.1	27	17	11	3.1	2.5
19	1.1	1.0	1.0	.89	.87	.97	5.9	23	26	9.8	2.8	2.3
20	.98	1.2	1.1	.78	.93	1.1	5.9	20	29	8.9	2.5	2.2
21	1.1	1.4	.95	.60	.83	1.1	7.0	15	30	8.1	3.3	2.2
22	1.1	1.4	.86	.60	.84	1.0	7.0	13	18	7.5	4.1	2.2
23	.95	1.3	.99	.60	.84	1.0	5.8	11	19	7.1	3.3	2.1
24	.94	1.2	1.2	.55	.89	1.0	4.3	11	15	6.4	2.8	2.0
25	1.2	1.1	1.0	.55	.97	1.2	3.8	16	15	6.2	2.6	1.8
26	1.4	1.2	.90	.55	1.1	1.5	3.4	19	13	6.2	2.4	1.7
27	1.3	1.2	.90	.69	1.1	1.6	3.3	20	12	6.1	2.4	1.6
28	1.4	1.1	1.0	.80	1.1	1.7	3.0	20	26	6.1	2.3	1.4
29	1.2	1.1	1.0	.86	1.1	2.0	3.2	23	21	6.8	2.0	1.4
30	1.2	1.0	.90	.89	---	1.7	5.1	25	12	10	1.9	1.4
31	1.6	---	1.0	.88	---	2.0	---	21	---	18	1.8	---
TOTAL	35.22	39.6	31.44	24.06	24.80	32.85	108.0	538.1	766	288.8	127.2	60.33
MEAN	1.14	1.32	1.01	.78	.86	1.06	3.60	17.4	25.5	9.32	4.10	2.01
MAX	1.6	1.7	1.2	1.0	1.1	2.0	7.0	50	51	18	12	4.3
MIN	.82	1.0	.74	.55	.70	.70	1.5	4.8	12	6.1	1.8	.81
AC-FT	70	79	62	48	49	65	214	1070	1520	573	252	120

CAL YR 1987 TOTAL 1829.86 MEAN 5.01 MAX 62 MIN .60 AC-FT 3630
WTR YR 1988 TOTAL 2076.40 MEAN 5.67 MAX 51 MIN .55 AC-FT 4120

09064000 HOMESTAKE CREEK AT GOLD PARK, CO

LOCATION.--Lat 39°24'20", long 106°25'58", Eagle County, Hydrologic Unit 14010003, on left bank at Gold Park, 400 ft downstream from ford, at Gold Park Campground, 0.5 mi downstream from French Creek, and 8 mi southwest of Red Cliff.

DRAINAGE AREA.--36.0 mi² (revised).

PERIOD OF RECORD.--October 1947 to September 1954, August 1972 to current year.

REVISED RECORDS.--WRD Colo. 1973: Drainage area at former site.

GAGE.--Water-stage recorder. Elevation of gage is 9,[illegible] ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Aug. 1, 1972, water-stage recorder at site 1,[illegible] ft upstream at datum 9,[illegible] ft, above National Geodetic Vertical Datum of 1929 (river-profile survey).

REMARKS.--Estimated daily discharges: Nov. 9, 10, 13, 14, and Nov. 16 to Apr. 13. Records good except for estimated daily discharges, which are poor. Flow regulated by Homestake Lake, capacity, [illegible] acre-ft, since June 7, 1966. Transmountain diversion upstream from station to Arkansas River basin through Homestake tunnel since June 66 1967. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--7 years (water years 1948-54), [illegible] ft³/s; [illegible] acre-ft/yr, prior to diversion through Homestake tunnel; 15 years (water years 1973-88), 29.6 ft³/s; [illegible] acre-ft/yr, subsequent to diversion through Homestake tunnel.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, [illegible] ft³/s, June [illegible], 19[illegible], gage height, [illegible] ft, site and datum then in use, from rating curve extended above 700 ft³/s; minimum not determined.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, [illegible] ft³/s at [illegible] June [illegible], gage height, [illegible] ft; minimum daily, 5.2 ft³/s, Jan. 26.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.6	8.9	[illegible]	[illegible]	[illegible]	8.6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
2	8.5	9.1	7.9	[illegible]	[illegible]	9.7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
3	8.3	8.7	8.7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
4	8.3	8.4	8.4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
5	8.3	9.1	[illegible]	7.7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
6	8.0	8.7	8.4	[illegible]	6.5	8.3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7	8.0	9.0	8.1	[illegible]	6.6	8.1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
8	7.8	8.8	7.8	7.0	7.0	8.1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
9	7.7	9.0	7.8	7.7	[illegible]	8.4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
10	7.7	11	8.1	7.6	[illegible]	8.7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
11	7.4	9.3	8.5	7.9	7.4	8.1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
12	7.4	9.0	8.6	7.3	7.4	8.3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
13	7.7	8.4	7.2	6.6	7.2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
14	8.6	7.8	6.6	5.9	7.2	8.6	19	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
15	9.0	8.5	6.6	6.5	7.3	8.1	[illegible]	[illegible]	37	[illegible]	[illegible]	[illegible]
16	8.9	8.6	6.1	7.0	7.9	8.1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
17	8.5	8.2	5.8	7.0	8.1	8.1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
18	8.3	8.2	5.8	6.3	7.7	8.3	[illegible]	91	[illegible]	[illegible]	[illegible]	[illegible]
19	7.9	8.8	6.8	6.3	7.4	8.3	[illegible]	79	49	[illegible]	[illegible]	[illegible]
20	7.5	9.6	8.0	5.8	8.0	7.7	36	55	[illegible]	[illegible]	[illegible]	[illegible]
21	8.7	11	7.6	5.5	8.4	7.2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
22	7.6	11	7.0	6.0	8.3	7.7	[illegible]	35	[illegible]	[illegible]	[illegible]	[illegible]
23	7.4	9.8	7.7	6.2	8.3	7.2	[illegible]	34	[illegible]	[illegible]	[illegible]	[illegible]
24	7.5	9.5	8.5	6.0	8.2	7.2	22	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
25	8.2	8.9	8.2	5.6	8.4	7.2	18	51	[illegible]	[illegible]	[illegible]	[illegible]
26	7.9	8.4	7.3	5.2	8.6	7.5	19	53	[illegible]	[illegible]	[illegible]	[illegible]
27	7.9	8.7	7.3	5.5	8.3	8.0	16	55	[illegible]	14	[illegible]	[illegible]
28	7.9	8.6	8.0	6.0	8.3	8.2	15	60	42	15	[illegible]	[illegible]
29	7.8	8.0	8.0	6.0	8.6	12	18	66	43	[illegible]	[illegible]	[illegible]
30	8.5	8.5	7.3	6.3	---	9.2	31	58	30	[illegible]	[illegible]	[illegible]
31	8.7	---	8.0	6.6	---	9.6	---	44	---	59	[illegible]	---
TOTAL	250.3	268.4	236.3	206.5	213.8	259.4	575	1651	1736	756	[illegible]	[illegible]
MEAN	8.07	8.95	7.62	6.66	7.37	8.37	19.2	53.3	57.9	24.4	[illegible]	[illegible]
MAX	9.0	11	8.7	8.2	8.6	12	35	105	125	59	[illegible]	[illegible]
MIN	7.4	7.8	5.8	5.2	5.6	7.2	10	25	30	14	[illegible]	[illegible]
AC-FT	496	532	469	410	424	515	1140	3270	3440	[illegible]	[illegible]	[illegible]

CAL YR 1987 TOTAL 7673.2 MEAN 21.0 MAX 167 MIN 5.5 AC-FT 15220
WTR YR 1988 TOTAL 6804.7 MEAN 18.6 MAX 125 MIN 5.2 AC-FT 13500

3

09064500 HOMESTAKE CREEK NEAR RED CLIFF, CO

LOCATION.--Lat 39°28'24", long 106°22'02", in NE¼NE¼ sec.6, T.7 S., R.80 W., Eagle County, Hydrologic Unit 14010003, on right bank at downstream side of Forest Service road bridge, 2.4 mi south of Red Cliff, and 3.0 mi upstream from mouth.

DRAINAGE AREA.--58.2 mi² (revised).

PERIOD OF RECORD.--October 1910 to September 1918, May 1944 to current year. Published as "at Redcliff" October 1910 to September 1916.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 8,733 ft above National Geodetic Vertical Datum of 1929 (river-profile survey). See WSP 1713 or 1733 for history of changes prior to May 8, 1961.

REMARKS.--Estimated daily discharges: Nov. 10, 12, 13, Nov. 15 to Apr. 14, Apr. 29 to May 19, and Sept. 1-10. Records good except for estimated daily discharges, which are poor. Flow regulated by Homestake Lake (capacity, 44,300 acre-ft) since June 7, 1966. Transmountain diversions upstream from station through Homestake tunnel (see elsewhere in this report) since June 6, 1967. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--30 years (water years 1911-18, 1945-66), 86.6 ft³/s; 62,740 acre-ft/yr, prior to diversion through Homestake tunnel; 22 years (water years 1967-88), 43.7 ft³/s; 31,660 acre-ft/yr, subsequent to diversion through Homestake tunnel.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 1,300 ft³/s, June 24, 1918, gage height, 6.2 ft, site and datum then in use; minimum observed, 2.60 ft³/s, Jan. 25, 1915 (discharge measurement).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 304 ft³/s at 2300 June 4, gage height, 2.90 ft; minimum daily, [illegible] ft³/s, Jan. [illegible].

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	[illegible]	[illegible]	[illegible]	[illegible]	7.6	9.7	[illegible]	[illegible]	[illegible]	48	48	9.0
2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	41	35	8.6
3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	9.8	[illegible]	[illegible]	[illegible]	42	28	8.3
4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	42	24	8.0
5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	17	87	[illegible]	39	20	7.5
6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	93	140	37	19	7.5
7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	9.4	[illegible]	73	141	37	18	7.5
8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	9.4	[illegible]	[illegible]	131	35	19	7.5
9	8.7	[illegible]	[illegible]	[illegible]	[illegible]	9.8	24	63	143	32	16	7.5
10	8.7	14	[illegible]	[illegible]	[illegible]	9.3	28	79	143	31	14	7.8
11	8.7	[illegible]	[illegible]	[illegible]	8.7	9.4	35	80	113	32	13	9.1
12	7.8	[illegible]	[illegible]	[illegible]	8.7	9.6	34	125	131	51	13	13
13	8.7	[illegible]	[illegible]	7.7	8.4	9.6	45	123	86	35	14	16
14	[illegible]	[illegible]	[illegible]	[illegible]	8.4	[illegible]	53	160	71	41	11	16
15	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	9.8	59	170	63	46	11	14
16	[illegible]	[illegible]	7.0	[illegible]	[illegible]	9.8	65	171	68	41	11	13
17	[illegible]	9.4	[illegible]	[illegible]	[illegible]	[illegible]	63	147	67	40	15	12
18	[illegible]	9.4	6.7	[illegible]	[illegible]	[illegible]	55	140	55	35	13	11
19	[illegible]	[illegible]	[illegible]	[illegible]	8.5	[illegible]	58	[illegible]	73	[illegible]	12	11
20	9.5	11	[illegible]	6.7	9.3	[illegible]	62	112	55	33	11	11
21	9.3	[illegible]	[illegible]	[illegible]	[illegible]	8.6	73	87	85	24	11	10
22	9.5	12	[illegible]	[illegible]	9.4	8.4	62	77	75	21	15	11
23	9.2	11	[illegible]	7.2	9.4	8.4	53	69	61	19	13	11
24	9.3	11	9.9	7.3	9.6	8.4	47	77	62	19	12	10
25	12	9.9	9.4	6.6	9.8	8.4	43	93	57	19	11	9.8
26	11	9.6	8.5	6.0	10	9.0	49	96	57	19	11	9.7
27	10	10	8.5	6.4	9.7	9.7	37	100	54	20	11	9.1
28	9.5	10	9.3	7.0	10	9.7	37	101	56	21	10	8.7
29	10	9.2	9.3	7.0	10	14	58	114	74	31	9.8	8.8
30	13	9.8	8.5	7.4	---	10	76	109	49	36	9.8	9.2
31	14	---	9.4	7.8	---	11	---	85	---	76	9.8	---
TOTAL	337.5	347.3	272.7	240.3	250.5	298.7	1249	3131	2725.6	1043	488.4	302.5
MEAN	10.9	11.6	8.80	7.75	8.64	9.64	41.6	101	90.9	33.6	15.8	10.1
MAX	14	15	10	9.5	10	14	76	170	186	76	48	16
MIN	7.8	9.2	6.7	6.0	6.6	8.4	12	62	49	19	9.8	7.5
AC-FT	669	689	541	477	497	592	2480	6210	5410	2070	969	600

CAL YR 1987 TOTAL 10327.5 MEAN 28.3 MAX 226 MIN 2.5 AC-FT 20480
WTR YR 1988 TOTAL 10686.5 MEAN 29.2 MAX 186 MIN 6.0 AC-FT 21200

09065100 CROSS CREEK NEAR MINTURN, CO

LOCATION.--Lat 39°34'05", long 106°24'43", in SW¼SW¼ sec.36, T.5 S., R.81 W., Eagle County, Hydrologic Unit 14010003, on right bank 0.4 mi upstream from mouth and 1.5 mi southeast of Minturn.

DRAINAGE AREA.--34.2 mi^2 (revised).

PERIOD OF RECORD.--May 1956 to September 1963, October 1967 to current year.

REVISED RECORDS.--WDR-CO-81-2: 1980 (M).

GAGE.--Water-stage recorder. Elevation of gage is 7,992 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to July 18, 1956, nonrecording gage at site 0.3 mi downstream at different datum.

REMARKS.--Estimated daily discharges: Nov. 17 to Apr. 13. Records good except for estimated daily discharges, which are poor. Bolts ditch exports water upstream from station to tailings ponds and recreation lake along Eagle River. Diversion 0.5 mi upstream from station for water supply of school and for municipal supply of Minturn. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--28 years, 52.9 ft^3/s; 38,330 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 754 ft^3/s, June 30, 1957, gage height, 5.45 ft; maximum gage height, 6.14 ft, Aug. 6, 1983; minimum daily discharge, 0.1 ft^3/s, Dec. 27-31, 1962, Jan. 6-8, 11-15, 1963.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 400 ft^3/s, and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
June 5	0500	*462	*4.68	No other peak greater than base discharge.			

Minimum daily, 1.9 ft^3/s, Jan. 3, 4.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.8	8.2	3.8	2.6	2.6	2.8	5.3	58	103	118	45	[illegible]
2	9.3	9.5	3.8	2.2	2.5	2.6	4.7	45	96	104	33	[illegible]
3	8.5	9.1	4.0	1.9	2.3	2.5	4.7	38	171	94	32	[illegible]
4	8.6	7.8	3.8	1.9	2.2	2.5	5.4	41	293	89	27	[illegible]
5	8.4	7.2	3.7	2.1	2.2	2.4	6.0	53	367	94	25	[illegible]
6	8.1	6.6	3.7	2.3	2.4	2.3	8.7	61	314	87	[illegible]	[illegible]
7	7.4	8.0	3.5	2.6	2.6	2.3	13	47	335	84	22	[illegible]
8	7.1	7.5	3.4	2.7	2.5	2.3	17	43	307	76	26	[illegible]
9	6.9	5.3	3.4	2.7	2.4	2.3	16	39	325	66	21	3.4
10	6.2	6.6	3.5	2.7	2.5	2.3	19	41	345	60	18	4.1
11	6.0	6.5	3.3	2.7	2.5	2.3	17	40	310	61	16	10
12	6.0	8.4	3.0	2.6	2.5	2.4	23	61	253	56	16	19
13	6.1	7.7	2.7	2.3	2.4	2.5	28	95	221	55	16	[illegible]
14	8.0	6.2	2.6	2.2	2.3	2.6	39	135	153	55	14	[illegible]
15	11	6.1	2.5	2.1	2.4	2.8	38	161	173	50	13	[illegible]
16	9.8	5.2	2.6	2.2	2.3	2.9	37	186	182	47	15	16
17	8.1	5.0	2.6	2.4	2.2	3.0	44	208	201	45	20	14
18	7.4	5.0	2.7	2.4	2.2	3.0	39	224	193	42	17	13
19	7.3	4.5	2.7	2.2	2.2	3.0	42	235	235	39	15	12
20	6.2	5.0	2.6	2.0	2.3	3.1	41	154	274	35	13	10
21	6.5	4.7	2.6	2.2	2.5	3.2	46	112	287	32	13	9.9
22	5.5	4.7	2.5	2.3	2.6	3.4	38	84	265	29	24	11
23	5.4	4.5	2.4	2.2	2.6	3.5	31	71	225	26	19	11
24	5.2	4.3	2.1	2.2	2.6	3.5	27	94	237	25	14	9.6
25	7.5	4.2	2.1	2.2	2.7	3.5	25	142	211	24	13	8.7
26	7.3	4.1	2.1	2.2	2.8	4.0	25	141	212	23	11	7.4
27	6.2	4.2	2.3	2.3	2.8	4.0	24	157	178	26	13	7.0
28	5.8	4.1	2.6	2.5	2.9	3.8	25	171	147	24	12	6.9
29	6.1	3.9	2.6	2.6	2.9	6.0	31	229	174	38	10	7.0
30	6.8	4.0	2.5	2.7	---	4.3	44	224	135	44	9.5	6.8
31	7.0	---	2.5	2.7	---	4.6	---	133	---	60	9.0	---
TOTAL	225.5	178.1	90.2	72.9	71.9	95.7	763.3	3523	6922	1708	581.5	309.4
MEAN	7.27	5.94	2.91	2.35	2.48	3.09	25.4	114	231	55.1	18.8	10.3
MAX	11	9.5	4.0	2.7	2.9	6.0	46	235	367	118	45	25
MIN	5.2	3.9	2.1	1.9	2.2	2.3	4.7	38	96	23	9.0	3.4
AC-FT	447	353	179	145	143	190	1510	6990	13730	3390	1150	614

CAL YR 1987 TOTAL 14324.7 MEAN 39.2 MAX 389 MIN 2.0 AC-FT 28410
WTR YR 1988 TOTAL 14541.5 MEAN 39.7 MAX 367 MIN 1.9 AC-FT 28840

09065500 GORE CREEK AT UPPER STATION, NEAR MINTURN, CO

LOCATION.--Lat 39°37'33", long 106°16'39", in NE¼NW¼ sec.18, T.5 S., R.79 W., Eagle County, Hydrologic Unit 14010003, on right bank 10 ft downstream from bridge pier on Interstate 70, 0.2 mi upstream from Black Gore Creek, 4.4 mi east of Vail, and 8.4 mi northeast of Minturn.

DRAINAGE AREA.--14.3 mi².

PERIOD OF RECORD.--October 1947 to September 1956, October 1963 to current year.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 8,600 ft above National Geodetic Vertical Datum of 1929, from topographic map. Oct. 1, 1947 to Sept. 30, 1956, Oct. 1, 1963 to Sept. 30, 1980, at various sites about [illegible] ft upstream at different datums. See WDR-CO-80-2 for history of changes prior to Oct. 1, 1980.

REMARKS.--Estimated daily discharges: Oct. 22 to Apr. 27. Records good, except for estimated daily discharges, which are poor. No diversion upstream from station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--34 years, 30.1 ft³/s; 21,810 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 662 ft³/s, June 24, 1983, gage height, 2.60 ft, from rating curve extended above 140 ft³/s; maximum gage height, 6.65 ft, June 18, 1951, datum then in use; minimum daily discharge, 1.2 ft³/s, Mar. 5, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 200 ft³/s, and maximum (*).

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
May [illegible]	[illegible]	*333	*1.93	June 3	1930	319	1.85

Minimum daily discharge, 2.7 ft³/s, Jan. 3-14

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.0	5.0	3.9	2.9	3.0	3.0	3.4	33	96	83	19	4.2
2	5.6	5.0	3.7	2.8	3.0	3.0	3.8	25	108	72	15	4.2
3	6.6	5.0	3.6	2.7	3.0	3.0	4.5	21	162	65	15	3.9
4	7.0	5.0	3.5	2.7	3.0	3.0	4.9	20	205	66	14	3.9
5	8.2	5.0	3.5	2.7	3.0	3.0	5.6	21	225	65	13	3.9
6	5.8	5.0	3.5	2.7	3.0	3.0	6.2	24	236	58	12	3.9
7	5.3	5.0	3.5	2.7	3.0	3.0	7.2	20	225	57	12	3.6
8	5.5	5.0	3.5	2.7	3.0	3.0	8.0	19	224	53	12	3.6
9	5.5	5.0	3.5	2.7	3.0	3.0	9.4	17	212	46	10	3.6
10	5.5	5.0	3.5	2.7	3.0	3.0	11	16	209	40	9.2	3.9
11	5.5	4.9	3.5	2.7	3.0	3.0	12	18	182	36	8.7	5.8
12	4.8	4.7	3.5	2.7	3.0	3.0	13	29	165	35	9.6	7.8
13	5.5	4.5	3.5	2.7	3.0	3.0	15	54	143	33	8.7	7.4
14	6.2	4.3	3.3	2.7	3.0	3.0	18	83	127	34	7.4	7.8
15	7.4	4.1	3.1	2.9	3.0	3.0	20	110	143	31	7.0	6.6
16	7.0	4.0	3.0	3.0	3.0	3.0	20	121	143	27	7.4	5.5
17	6.3	4.0	3.0	3.0	3.0	3.0	20	132	143	26	9.1	5.5
18	6.6	4.0	3.0	3.0	3.0	3.0	20	125	142	24	8.3	4.8
19	5.8	4.0	3.0	3.0	3.0	3.0	20	113	155	22	7.0	4.2
20	5.5	4.0	3.0	3.0	3.0	3.0	20	78	150	20	5.9	4.2
21	5.1	4.0	3.0	3.0	3.0	3.0	20	58	148	18	5.8	4.2
22	5.3	4.0	3.0	3.0	3.0	3.0	19	48	141	17	6.6	4.1
23	5.2	4.0	3.0	3.0	3.0	3.0	18	41	134	15	5.2	4.2
24	5.2	4.0	3.0	3.0	3.0	3.0	17	55	132	15	4.8	3.9
25	5.0	4.0	3.0	3.0	3.0	3.0	17	87	128	15	4.5	3.6
26	5.0	4.0	3.0	3.0	3.0	3.0	16	110	125	15	4.2	3.4
27	5.0	4.0	3.0	3.0	3.0	3.0	15	123	107	15	4.2	3.4
28	5.0	4.0	3.0	3.0	3.0	3.0	15	133	102	15	5.5	3.4
29	5.0	4.0	3.0	3.0	3.0	3.0	17	150	138	18	4.8	3.1
30	5.0	4.0	3.0	3.0	---	3.0	22	138	97	19	4.5	3.6
31	5.0	---	3.0	3.0	---	3.0	---	107	---	18	4.5	---
TOTAL	179.3	132.5	100.6	89.0	87.0	93.0	418.0	2129	4647	1073	264.9	135.2
MEAN	5.78	4.42	3.25	2.87	3.00	3.00	13.9	68.7	155	34.6	8.55	4.51
MAX	8.2	5.0	3.9	3.0	3.0	3.0	22	150	236	83	19	7.8
MIN	4.8	4.0	3.0	2.7	3.0	3.0	3.4	16	96	15	4.2	3.1
AC-FT	356	263	200	177	173	184	829	4220	9220	2130	525	268

CAL YR 1987 TOTAL 8474.7 MEAN 23.2 MAX 198 MIN 3.0 AC-FT 16810
WTR YR 1988 TOTAL 9348.5 MEAN 25.5 MAX 236 MIN 2.7 AC-FT 18540

09066000 BLACK GORE CREEK NEAR MINTURN, CO

LOCATION.--Lat 39°35'47", long 106°15'52", Eagle County, Hydrologic Unit 14010003, on right bank 200 ft from U.S. Highway 6, 0.3 mi upstream from Timber Creek, 2.5 mi upstream from mouth, and 9 mi east of Minturn.

DRAINAGE AREA.--12.6 mi² (revised).

PERIOD OF RECORD.--October 1947 to September 1956, October 1963 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 9,150 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to October 1963, at site 15 ft upstream, at present datum.

REMARKS.--Estimated daily discharges: Nov. 17 to Apr. 27. Records fair except for estimated daily discharges, which are poor. No diversions upstream from station. Natural regulation by two small recreation lakes upstream from station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--34 years, 17.3 ft³/s; 12,530 acre-ft/yr. The figure published in the 1987 report was in error; the correct figure is 33 years, 17.5 ft3/s, 12,680 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 365 ft³/s, June 7, 1952, gage height, 5.42 ft; maximum gage height, 6.00 ft, Mar. 30, 1968 (backwater from ice); minimum daily discharge, 0.90 ft³/s, Feb. 22, 1968, Jan. 30, 1970, Feb. 4 to Mar. 6, 1979.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 150 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
June 6	1900	*150	*4.00	No other peak greater than base discharge.			

Minimum daily, 1.8 ft³/s, Dec. 17-25.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.2	4.4	2.0	2.0	2.3	2.3	2.3	14	70	21	6.6	2.9
2	3.2	4.6	2.0	2.0	2.3	2.3	2.3	13	74	20	5.9	2.9
3	3.1	4.3	2.0	2.0	2.3	2.3	2.3	12	98	19	5.4	2.7
4	3.1	4.2	2.0	2.0	2.3	2.3	2.3	13	118	18	5.1	2.7
5	3.1	4.1	2.0	2.0	2.3	2.3	2.3	15	116	17	4.9	2.6
6	3.1	4.0	2.0	2.0	2.3	2.3	2.3	17	119	15	4.8	2.6
7	3.1	3.8	2.0	2.1	2.3	2.3	2.3	14	118	14	4.9	2.5
8	3.1	3.6	2.0	2.2	2.3	2.3	2.3	14	115	13	5.1	2.4
9	3.0	3.4	2.0	2.3	2.3	2.3	2.3	13	111	12	4.5	2.4
10	2.9	3.2	2.0	2.3	2.3	2.3	2.3	12	106	12	4.2	3.0
11	2.9	3.1	2.0	2.3	2.3	2.3	2.3	15	96	11	4.1	3.6
12	3.3	2.9	2.0	2.3	2.3	2.3	2.3	23	85	10	4.6	3.7
13	3.4	2.7	2.0	2.3	2.3	2.3	2.3	37	76	10	4.0	3.2
14	4.5	2.6	2.0	2.3	2.3	2.3	2.3	51	66	9.6	3.8	3.1
15	4.4	2.4	2.0	2.3	2.3	2.3	2.3	62	60	9.2	3.8	3.0
16	4.3	2.3	1.9	2.3	2.3	2.3	2.5	70	56	8.7	4.6	2.9
17	4.1	2.2	1.8	2.3	2.3	2.3	2.7	72	52	8.3	4.5	2.8
18	3.9	2.0	1.8	2.3	2.3	2.3	2.9	74	49	7.7	4.1	2.7
19	3.7	2.0	1.8	2.3	2.3	2.3	3.1	72	47	7.4	3.8	2.6
20	3.8	2.0	1.8	2.3	2.3	2.3	3.4	53	45	7.0	3.7	3.8
21	4.0	2.0	1.8	2.3	2.3	2.3	3.8	42	42	6.6	4.2	7.1
22	4.1	2.0	1.8	2.3	2.3	2.3	4.2	37	39	6.2	4.0	3.2
23	4.0	2.0	1.8	2.3	2.3	2.3	4.7	34	36	6.0	3.6	2.8
24	3.6	2.0	1.8	2.3	2.3	2.3	5.1	39	34	6.0	3.4	2.6
25	4.5	2.0	1.8	2.3	2.3	2.3	5.6	49	31	5.9	3.3	2.5
26	4.1	2.0	1.9	2.3	2.3	2.3	6.0	63	30	6.2	3.4	2.5
27	4.1	2.0	2.0	2.3	2.3	2.3	6.7	75	28	5.8	3.4	2.5
28	4.1	2.0	2.0	2.3	2.3	2.3	7.4	82	27	7.2	3.2	2.5
29	3.9	2.0	2.0	2.3	2.3	2.3	8.5	97	29	7.9	3.1	2.4
30	4.2	2.0	2.0	2.3	---	2.3	13	98	24	7.1	3.0	2.4
31	4.4	---	2.0	2.3	---	2.3	---	82	---	7.2	2.9	---
TOTAL	114.2	83.8	60.0	69.2	66.7	71.3	114.1	1364	1997	322.0	129.9	88.6
MEAN	3.68	2.79	1.94	2.23	2.30	2.30	3.80	44.0	66.6	10.4	4.19	2.95
MAX	4.5	4.6	2.0	2.3	2.3	2.3	13	98	119	21	6.6	7.1
MIN	2.9	2.0	1.8	2.0	2.3	2.3	2.3	12	24	5.8	2.9	2.4
AC-FT	227	166	119	137	132	141	226	2710	3960	639	258	176

CAL YR 1987 TOTAL 4035.7 MEAN 11.1 MAX 110 MIN 1.8 AC-FT 8000
WTR YR 1988 TOTAL 4480.8 MEAN 12.2 MAX 119 MIN 1.8 AC-FT 8890

09066100 BIGHORN CREEK NEAR MINTURN, CO

LOCATION.--Lat 39°38'24", long 106°17'34", in N½ sec.12, T.5 S., R.80 W., Eagle County, Hydrologic Unit 14010003, on left bank 0.3 mi upstream from U.S. Highway 6, 0.4 mi upstream from mouth, 4.5 mi east of Vail, and 8.5 mi northeast of Minturn.

DRAINAGE AREA.--4.54 mi² (revised).

PERIOD OF RECORD.--October 1963 to current year.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 8,625 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 11 to Apr. 12, and Aug. 19 to Sept. 30. Records good except for estimated daily discharges, which are poor. No regulation or diversion upstream from station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--25 years, 10.0 ft³/s; 7,240 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 338 ft³/s, June 8, 1985, gage height, 4.10 ft, from rating curve extended above 82 ft³/s; maximum gage height, 4.26 ft, June 8, 1985 (backwater from debris); minimum daily discharge determined, 0.10 ft³/s, Feb. 8, 1967, Jan. 30, 1970.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 50 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
May 16	0200	52	3.25	May 29	2200	52	3.32
June 6	2000	*102	*3.53				

Minimum daily discharge, 0.76 ft³/s, Jan. 9-15.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	2.3	1.0	.80	.80	.80	.92	12	28	28	7.2	2.2
2	1.7	2.3	1.0	.80	.80	.80	1.1	9.5	31	24	5.9	2.2
3	1.7	2.4	1.0	.80	.80	.80	1.2	7.8	48	21	5.9	2.1
4	1.7	2.3	1.0	.80	.80	.80	1.4	6.7	61	23	5.9	2.0
5	1.7	2.2	1.0	.80	.80	.80	1.6	6.9	72	23	5.2	2.0
6	1.6	2.1	1.0	.80	.80	.80	1.9	7.8	76	22	5.2	1.9
7	1.6	2.0	1.0	.80	.80	.80	2.2	6.9	71	21	5.4	1.9
8	1.6	1.9	1.0	.78	.80	.80	2.5	6.4	69	18	5.2	1.8
9	1.5	1.8	1.0	.76	.80	.80	2.9	5.9	70	15	4.6	2.0
10	1.5	1.8	1.0	.76	.80	.80	3.3	5.4	66	14	4.0	2.3
11	1.5	1.7	1.0	.76	.80	.80	3.8	5.6	60	13	4.1	2.5
12	1.8	1.7	1.0	.76	.80	.80	4.5	9.1	51	14	4.1	2.7
13	2.1	1.6	.96	.76	.80	.80	8.7	18	46	15	3.7	2.8
14	2.4	1.5	.94	.76	.80	.80	10	37	43	15	3.6	2.7
15	2.3	1.5	.90	.76	.80	.80	8.8	41	45	14	3.6	2.6
16	2.3	1.5	.90	.80	.80	.80	9.1	44	45	12	3.7	2.4
17	2.2	1.5	.90	.80	.80	.80	11	41	47	11	4.0	2.2
18	2.1	1.5	.90	.80	.80	.80	9.8	40	46	11	3.3	2.0
19	2.0	1.4	.90	.80	.80	.80	12	39	50	11	3.2	2.0
20	2.0	1.4	.90	.80	.80	.80	11	27	49	9.1	3.1	1.9
21	2.0	1.3	.90	.80	.80	.80	13	18	46	8.8	3.0	1.9
22	2.0	1.3	.90	.80	.80	.80	11	14	44	8.1	2.9	1.8
23	2.0	1.2	.90	.80	.80	.80	8.8	13	40	7.5	2.8	1.8
24	2.0	1.2	.90	.80	.80	.80	7.2	18	41	6.7	2.7	1.8
25	2.2	1.1	.90	.80	.80	.80	6.1	30	40	6.4	2.7	1.7
26	2.4	1.1	.88	.80	.80	.80	5.9	33	38	6.1	2.6	1.7
27	2.2	1.0	.84	.80	.80	.80	4.9	35	34	5.9	2.5	1.7
28	2.0	1.0	.80	.80	.80	.80	4.4	40	33	6.1	2.4	1.6
29	2.0	1.0	.80	.80	.80	.80	5.0	48	41	6.1	2.4	1.6
30	2.0	1.0	.80	.80	---	.80	7.8	46	32	5.7	2.3	1.6
31	2.2	---	.80	.80	---	.80	---	36	---	7.5	2.3	---
TOTAL	60.0	47.6	28.72	24.50	23.20	24.80	181.82	708.0	1463	410.0	119.5	61.4
MEAN	1.94	1.59	.93	.79	.80	.80	6.06	22.8	48.8	13.2	3.85	2.05
MAX	2.4	2.4	1.0	.80	.80	.80	13	48	76	28	7.2	2.8
MIN	1.5	1.0	.80	.76	.80	.80	.92	5.4	28	5.7	2.3	1.6
AC-FT	119	94	57	49	46	49	361	1400	2900	813	237	122

CAL YR 1987 TOTAL 2849.52 MEAN 7.81 MAX 72 MIN .80 AC-FT 5650
WTR YR 1988 TOTAL 3152.54 MEAN 8.61 MAX 76 MIN .76 AC-FT 6250

09066150 PITKIN CREEK NEAR MINTURN, CO

LOCATION.--Lat 39°38'37", long 106°18'07", in SW¼SW¼ sec.1, T.5 S., R.80 W., Eagle County, Hydrologic Unit 14010003, on left bank, 1,000 ft upstream from U.S. Highway 6, 1,200 ft upstream from mouth, 4.0 mi east of Vail, and 8 mi northeast of Minturn.

DRAINAGE AREA.--5.32 mi² (revised).

PERIOD OF RECORD.--Annual maximum and occasional low-flow measurements water years 1965-66. October 1966 to current year.

REVISED RECORDS.--WRD Colo. 1971: 1967-70.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 8,525 ft above National Geodetic Vertical Datum of 1929, from topographic map. Oct. 1, 1964, to Sept. 30, 1966, crest-stage gage at datum 0.98 ft lower, at site 300 ft downstream.

REMARKS.--Estimated daily discharges: Nov. 16-22, Dec. 7 to Mar. 29, and Apr. 1. Records good except for estimated daily discharges, which are poor. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--22 years, 12.0 ft³/s; 8,690 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 265 ft³/s, June 8, 1985, gage height, 2.85 ft; maximum gage height, 3.60 ft, June 21, 1983 (backwater from debris); minimum daily discharge, 0.24 ft³/s, Oct. 29 to Nov. 1, 1972.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 60 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
June 5	2030	*66	*2.54	No other peak greater than base discharge.			

Minimum daily, 0.75 ft³/s, Mar. 30.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.8	3.1	2.0	1.2	1.0	1.0	1.1	9.3	29	30	7.0	2.9
2	2.7	3.4	1.9	1.1	1.0	1.0	1.1	7.7	33	27	6.2	2.9
3	2.7	3.2	1.9	1.1	1.0	1.0	1.1	7.0	46	24	5.9	2.7
4	2.6	3.1	1.8	1.0	1.0	1.0	1.2	6.7	47	24	5.8	2.6
5	2.6	3.0	1.8	1.0	1.0	1.0	1.3	6.8	60	24	5.5	2.5
6	2.6	3.1	1.7	1.0	1.0	1.0	1.5	7.3	59	22	5.4	2.5
7	2.5	3.2	1.6	1.0	1.0	1.0	2.3	7.0	58	21	5.6	2.5
8	2.5	3.4	1.6	1.0	1.0	1.0	3.1	6.9	49	18	5.7	2.4
9	2.4	2.9	1.5	1.0	1.0	1.0	3.4	6.4	52	15	5.1	2.3
10	2.4	3.0	1.5	1.0	1.0	1.0	3.7	6.0	52	13	4.8	2.5
11	2.3	3.2	1.5	1.0	1.0	1.0	3.0	6.1	49	12	4.5	3.3
12	2.3	2.9	1.5	1.0	1.0	1.0	4.1	8.8	45	12	4.7	4.0
13	2.4	2.9	1.5	1.0	1.0	1.0	5.9	16	38	12	4.5	4.2
14	3.2	3.0	1.5	1.0	1.0	1.0	6.9	27	34	12	4.2	4.1
15	3.3	2.9	1.5	1.0	1.0	1.0	6.8	33	36	11	4.2	3.6
16	3.3	2.5	1.5	1.0	1.0	1.0	6.9	39	38	10	4.5	3.2
17	3.0	2.5	1.5	1.0	1.0	1.0	8.0	39	38	10	4.8	2.9
18	2.7	2.4	1.5	1.0	1.0	1.0	7.2	41	37	9.6	4.5	2.8
19	2.5	2.4	1.5	1.0	1.0	1.0	7.2	40	44	9.2	4.2	2.8
20	2.3	2.3	1.5	1.0	1.0	1.0	7.6	27	41	8.4	4.0	2.7
21	2.3	2.3	1.5	1.0	1.0	1.0	8.8	19	40	7.9	4.2	2.5
22	2.2	2.3	1.5	1.0	1.0	1.0	7.7	15	39	7.5	4.2	2.5
23	2.2	2.3	1.5	1.0	1.0	1.0	7.0	14	37	7.2	3.9	2.5
24	2.3	2.4	1.5	1.0	1.0	1.0	6.4	21	39	6.8	3.6	2.4
25	3.0	2.3	1.5	1.0	1.0	1.0	5.7	31	37	6.7	3.5	2.4
26	2.8	2.2	1.5	1.0	1.0	1.0	5.4	34	36	6.5	3.2	2.3
27	2.7	2.2	1.5	1.0	1.0	1.0	5.0	39	34	6.4	3.2	2.2
28	2.6	2.1	1.4	1.0	1.0	1.0	4.7	41	32	6.3	3.1	2.3
29	2.6	2.2	1.4	1.0	1.0	1.0	5.1	46	39	6.4	3.0	2.4
30	2.8	2.0	1.3	1.0	---	.75	7.3	47	31	6.3	3.1	2.4
31	3.0	---	1.2	1.0	---	1.1	---	36	---	7.2	3.0	---
TOTAL	81.6	80.7	48.1	31.4	29.0	30.85	146.5	691.0	1249	399.4	139.1	83.3
MEAN	2.63	2.69	1.55	1.01	1.00	1.00	4.88	22.3	41.6	12.9	4.49	2.78
MAX	3.3	3.4	2.0	1.2	1.0	1.1	8.8	47	60	30	7.0	4.2
MIN	2.2	2.0	1.2	1.0	1.0	.75	1.1	6.0	29	6.3	3.0	2.2
AC-FT	162	160	95	62	58	61	291	1370	2480	792	276	165

CAL YR 1987 TOTAL 2774.2 MEAN 7.60 MAX 46 MIN 1.2 AC-FT 5500
WTR YR 1988 TOTAL 3009.95 MEAN 8.22 MAX 60 MIN .75 AC-FT 5970

09066200 BOOTH CREEK NEAR MINTURN, CO

LOCATION.--Lat 39°38'54", long 106°19'21", at NE¼SE¼ of sec.3, T.5 S., R.80 W., Eagle County, Hydrologic Unit 14010003, on center bridge pier 100 ft upstream from U.S. Highway 6, 0.4 mi upstream from mouth, 3.0 mi northeast of Vail, and 7.0 mi northeast of Minturn.

DRAINAGE AREA.--6.02 mi^2 (revised).

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 8,325 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to June 4, 1984, gage at site 1,000 ft upstream at different datum (gage destroyed by rock slide).

REMARKS.--Estimated daily discharges: Nov. 22 to Apr. 1. Records good, except for estimated daily discharges, which are poor. No diversion or regulation upstream from station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--24 years, 12.5 ft^3/s; 9,060 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 355 ft^3/s, June 15, 1978, gage height, 4.07 ft; maximum gage height, 4.62 ft, June 18, 1983 (backwater from debris); minimum daily discharge, 0.20 ft^3/s, Feb. 8, 1967, Jan. 29, 1970, Feb. 10-11, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 149 ft^3/s at 2100 June 6, gage height 3.33 ft; minimum daily, 0.83 ft^3/s, Sept. 6, 8, 9.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	2.2	1.2	1.0	1.0	1.0	1.2	15	35	27	3.5	1.0
2	1.1	2.4	1.2	1.0	1.0	1.0	2.0	12	41	23	3.1	.98
3	1.1	2.2	1.2	1.0	1.0	1.0	2.5	10	61	19	2.8	.90
4	1.0	2.1	1.2	1.0	1.0	1.0	2.9	9.7	88	18	2.7	.87
5	1.1	2.2	1.2	1.0	1.0	1.0	3.0	11	93	17	2.6	.85
6	1.1	2.3	1.2	1.0	1.0	1.0	3.2	13	85	16	2.5	.83
7	1.0	2.3	1.2	1.0	1.0	1.0	5.4	11	73	15	2.9	.85
8	1.0	2.4	1.2	1.0	1.0	1.0	8.1	11	76	14	2.9	.83
9	1.0	2.3	1.2	1.0	1.0	1.0	5.2	9.3	68	12	2.5	.83
10	1.0	2.4	1.2	1.0	1.0	1.0	4.2	8.5	70	11	2.3	.93
11	.93	2.2	1.2	1.0	1.0	1.0	4.7	9.0	63	9.4	2.1	1.4
12	.90	2.0	1.2	1.0	1.0	1.0	9.0	25	58	9.2	2.2	1.8
13	.88	1.9	1.2	1.0	1.0	1.0	15	36	48	8.8	2.0	1.7
14	1.3	1.9	1.2	1.0	1.0	1.0	15	45	40	8.4	1.9	1.6
15	1.6	1.8	1.2	1.0	1.0	1.0	13	47	44	7.6	1.8	1.4
16	1.5	2.0	1.2	1.0	1.0	1.0	14	52	48	7.2	1.9	1.3
17	1.6	2.3	1.2	1.0	1.0	1.0	17	51	48	6.8	1.9	1.3
18	1.6	2.4	1.2	1.0	1.0	1.0	14	53	49	6.3	1.8	1.2
19	1.5	2.1	1.2	1.0	1.0	1.0	14	54	58	5.8	1.5	1.2
20	1.2	1.5	1.2	1.0	1.0	1.0	14	40	55	5.4	1.4	1.2
21	1.3	1.5	1.2	1.0	1.0	1.0	18	29	53	5.0	1.5	1.2
22	1.3	1.4	1.2	1.0	1.0	1.0	15	25	48	4.6	1.5	1.2
23	1.3	1.4	1.2	1.0	1.0	1.0	12	22	45	4.2	1.3	1.2
24	1.3	1.4	1.2	1.0	1.0	1.0	9.5	25	45	3.9	1.2	1.2
25	1.7	1.2	1.2	1.0	1.0	1.0	7.4	33	44	3.7	1.2	1.1
26	1.7	1.2	1.2	1.0	1.0	1.0	6.4	41	39	3.7	1.1	1.1
27	1.7	1.2	1.2	1.0	1.0	1.0	5.6	48	39	3.5	1.1	1.1
28	1.7	1.2	1.1	1.0	1.0	1.0	5.4	55	40	3.4	1.1	1.1
29	1.8	1.2	1.1	1.0	1.0	1.0	6.0	62	51	3.4	1.1	1.1
30	1.9	1.2	1.0	1.0	---	1.0	11	57	31	3.9	1.0	1.1
31	2.0	---	1.0	1.0	---	1.0	---	43	---	4.1	1.0	---
TOTAL	41.31	55.8	36.6	31.0	29.0	31.0	263.7	962.5	1636	290.3	59.4	34.37
MEAN	1.33	1.86	1.18	1.00	1.00	1.00	8.79	31.0	54.5	9.36	1.92	1.15
MAX	2.0	2.4	1.2	1.0	1.0	1.0	18	62	93	27	3.5	1.8
MIN	.88	1.2	1.0	1.0	1.0	1.0	1.2	8.5	31	3.4	1.0	.83
AC-FT	82	111	73	61	58	61	523	1910	3250	576	118	68

CAL YR 1987 TOTAL 3356.82 MEAN 9.20 MAX 58 MIN .60 AC-FT 6660
WTR YR 1988 TOTAL 3470.98 MEAN 9.48 MAX 93 MIN .83 AC-FT 6880

09066300 MIDDLE CREEK NEAR MINTURN, CO

LOCATION.--Lat 39°38'45", long 106°22'54", in sec.6, T.5 S., R.80 W., Eagle County, Hydrologic Unit 14010003, on right bank 200 ft upstream from Interstate Highway 70, 0.2 mi upstream from mouth, and 5.0 mi northeast of Minturn.

DRAINAGE AREA.--5.94 mi^2 (revised).

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 8,200 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Oct. 1, 1977 at site 700 ft upstream, at different datum.

REMARKS.--Estimated daily discharges: Nov. 19 to Mar. 20. Records good except for estimated daily discharges, which are poor. No diversion or regulation upstream from station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--24 years, 6.12 ft^3/s; 4,430 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 116 ft^3/s, June 20, 1974, gage height, 2.65 ft, datum then in use; maximum gage height, 3.28 ft, June 25, 1983, backwater from debris; no flow at times most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 62 ft^3/s at 2030 June 8, gage height, 2.55 ft; minimum daily, 0.20 ft^3/s, Jan. 12-27.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.52	.77	.30	.24	.24	.25	.25	3.2	15	10	2.8	.61
2	.50	.92	.30	.23	.25	.25	.29	2.8	16	9.0	2.1	.70
3	.48	.74	.30	.23	.25	.25	.33	2.6	23	8.2	1.9	.57
4	.46	.67	.30	.23	.25	.25	.34	2.5	31	7.4	1.6	.52
5	.44	.62	.30	.23	.25	.25	.38	2.7	40	6.9	1.5	.48
6	.42	.71	.30	.23	.25	.25	.43	3.1	44	6.4	1.5	.45
7	.42	.69	.30	.23	.25	.25	.63	3.0	47	5.7	1.8	.42
8	.42	.69	.30	.23	.25	.25	.92	3.0	49	5.4	1.9	.39
9	.43	.46	.30	.22	.25	.25	.80	2.8	48	4.9	1.4	.37
10	.43	.66	.30	.22	.25	.25	.72	2.8	46	4.5	1.3	.42
11	.40	.65	.30	.21	.25	.25	.68	2.9	43	4.3	1.2	.73
12	.39	.45	.30	.20	.25	.25	.88	4.1	40	4.1	1.2	1.3
13	.47	.59	.30	.20	.25	.25	1.3	6.1	33	3.7	1.1	1.2
14	.67	.54	.30	.20	.25	.25	1.2	8.3	26	3.4	1.0	1.2
15	.71	.48	.30	.20	.25	.25	1.1	10	24	3.3	.94	.97
16	.62	.25	.30	.20	.25	.25	.95	13	24	3.2	1.2	.80
17	.58	.30	.30	.20	.25	.25	1.7	15	24	3.0	1.3	.72
18	.68	.33	.30	.20	.25	.25	1.2	18	24	2.8	1.1	.64
19	.66	.31	.30	.20	.25	.25	1.6	18	31	2.6	.89	.60
20	.43	.30	.30	.20	.25	.25	1.7	12	30	2.5	.86	.63
21	.41	.30	.30	.20	.25	.25	2.5	9.8	27	2.3	.92	.63
22	.47	.30	.30	.20	.25	.27	2.3	8.3	25	2.1	.96	.67
23	.51	.30	.30	.20	.25	.24	2.0	7.4	23	2.0	.79	.69
24	.59	.30	.30	.20	.25	.23	1.7	7.7	20	1.9	.73	.61
25	.89	30	.30	.20	.25	.21	1.2	8.6	18	1.8	.66	.56
26	.73	.30	.30	.20	.25	.24	.94	9.6	17	1.9	.67	.52
27	.62	.30	.30	.20	.25	.30	.97	12	16	2.0	.73	.50
28	.55	.30	.28	.21	.25	.32	.93	15	14	1.8	.69	.50
29	.64	.30	.27	.22	.25	.29	.91	20	15	2.0	.65	.53
30	.73	.30	.26	.23	---	.28	1.7	22	12	2.0	.62	.60
31	.68	---	.25	.23	---	.25	---	18	---	2.8	.61	---
TOTAL	16.95	14.13	9.16	6.59	7.24	7.88	32.55	274.3	845	123.9	36.62	19.53
MEAN	.55	.47	.30	.21	.25	.25	1.08	8.85	28.2	4.00	1.18	.65
MAX	.89	.92	.30	.24	.25	.32	2.5	22	49	10	2.8	1.3
MIN	.39	.25	.25	.20	.24	.21	.25	2.5	12	1.8	.61	.37
AC-FT	34	28	18	13	14	16	65	544	1680	246	73	39

CAL YR 1987 TOTAL 1393.96 MEAN 3.82 MAX 32 MIN .25 AC-FT 2760
WTR YR 1988 TOTAL 1393.85 MEAN 3.81 MAX 49 MIN .20 AC-FT 2760

09066400 RED SANDSTONE CREEK NEAR MINTURN, CO

LOCATION.--Lat 39°40'58", long 106°24'03", Eagle County, Hydrologic Unit 14010003, on left bank 150 ft upstream from road culvert, 1,400 ft upstream from Indian Creek, and 6.8 mi north of Minturn.

DRAINAGE AREA.--7.32 mi² (revised).

PERIOD OF RECORD.--October 1963 to current year.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 9,212 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 10, 18-20, 24, and Jan. 21-29. Records good except for estimated daily discharges, which are fair. No regulation or diversion upstream from station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--25 years, 9.21 ft³/s; 6,670 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 215 ft³/s, June 19, 1983, gage height, 4.66 ft, maximum gage height, 5.18 ft, Apr. 17, 1987 (backwater from ice); minimum daily discharge, 0.20 ft³/s, Jan. 30, 1970.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 70 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
May 29	2000	72	3.74	June 5	1700	*101	*3.96

Minimum daily discharge, 0.65 ft³/s, Oct. 12.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.86	.85	.67	.71	.72	.79	.92	9.4	40	13	5.6	1.0
2	.85	.85	.68	.71	.71	.80	.86	8.3	41	12	4.1	1.0
3	.81	.81	.71	.71	.71	.80	.85	7.2	53	12	3.6	1.0
4	.79	.99	.68	.71	.71	.80	.85	6.7	69	11	3.4	1.0
5	.76	1.3	.67	.71	.71	.80	.89	7.5	79	10	3.0	1.0
6	.76	1.5	.67	.71	.71	.80	1.2	9.6	79	9.7	3.0	1.0
7	.71	1.2	.67	.73	.71	.80	2.0	9.3	75	9.2	3.1	.92
8	.71	.99	.67	.76	.71	.80	2.1	8.6	71	8.9	3.7	.87
9	.69	.99	.67	.76	.71	.80	2.0	7.6	65	8.2	3.2	.85
10	.70	1.1	.67	.76	.71	.80	1.2	7.2	61	7.2	2.7	.85
11	.66	.98	.67	.76	.71	.80	1.7	8.4	55	6.8	2.5	.89
12	.65	.83	.67	.76	.74	.80	3.1	13	47	6.8	2.5	1.4
13	.67	.89	.67	.76	.76	.80	3.4	20	42	6.5	2.4	1.4
14	.67	.88	.67	.76	.76	.79	4.2	31	36	5.9	2.0	1.4
15	.67	.85	.67	.76	.76	.76	4.2	42	33	5.8	2.0	1.4
16	.74	.85	.67	.76	.76	.76	4.3	46	32	5.6	2.5	1.4
17	1.1	.81	.67	.76	.76	.75	4.4	47	32	5.2	2.9	1.4
18	1.2	.80	.67	.76	.76	.76	4.4	50	30	4.9	2.1	1.2
19	.85	.80	.67	.76	.76	.76	4.4	54	39	4.4	1.8	1.1
20	.92	.80	.69	.76	.76	.76	4.9	42	34	4.3	1.5	1.0
21	1.2	.96	.71	.74	.76	.76	6.2	33	29	4.0	1.5	1.0
22	1.3	.86	.71	.71	.76	.78	6.4	28	32	4.1	1.5	1.0
23	1.1	.94	.71	.70	.76	.82	6.2	25	25	3.8	1.4	1.0
24	1.3	.96	.71	.70	.76	.80	4.8	27	23	3.8	1.3	1.0
25	1.2	.97	.71	.70	.76	.80	4.1	30	21	3.8	1.2	.90
26	1.1	.76	.71	.70	.76	.82	3.8	33	20	3.8	1.1	.92
27	1.1	.76	.71	.72	.76	.86	3.9	40	19	3.8	1.1	.98
28	1.6	.75	.71	.74	.76	1.1	3.8	45	18	3.8	1.1	1.0
29	1.1	.71	.71	.74	.76	1.4	4.1	57	19	3.8	1.0	1.1
30	1.0	.67	.71	.77	---	1.4	6.5	62	16	3.8	1.0	1.2
31	.88	---	.71	.76	---	1.3	---	48	---	4.2	1.0	---
TOTAL	28.65	27.41	21.29	22.85	21.48	26.58	101.67	862.8	1235	200.1	70.8	32.27
MEAN	.92	.91	.69	.74	.74	.86	3.39	27.8	41.2	6.45	2.28	1.08
MAX	1.6	1.5	.71	.77	.76	1.4	6.5	62	79	13	5.6	1.4
MIN	.65	.67	.67	.70	.71	.76	.85	6.7	16	3.8	1.0	.85
AC-FT	57	54	42	45	43	53	202	1710	2450	397	140	64

CAL YR 1987 TOTAL 1813.02 MEAN 4.97 MAX 47 MIN .40 AC-FT 3600
WTR YR 1988 TOTAL 2650.90 MEAN 7.24 MAX 79 MIN .65 AC-FT 5260

09067000 BEAVER CREEK AT AVON, CO

LOCATION.--Lat 39°37'47", long 106°31'20", in NE¼SW¼ sec.12, T.5 S., R.82 W., Eagle County, Hydrologic Unit 14010003, on left bank at Avon, 550 ft upstream from U.S. Highways 6 and 24, and 700 ft upstream from mouth.

DRAINAGE AREA.--14.8 mi² (revised).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January to December 1911, January 1912 to September 1914 (gage heights and discharge measurements only), May 1974 to February 1988 (discontinued).

GAGE.--Water-stage recorder. Elevation of gage is 7,453 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to May 1, 1974, nonrecording gage near present site at different datum.

REMARKS.--Estimated daily discharges: Nov. 16, 25, 28, 29, Dec. 1, and Dec. 13 to Feb. 29. Records fair except for estimated daily discharges, which are poor. Diversions upstream from station for irrigation upstream and downstream from station. Slight natural regulation by several small lakes in headwaters.

AVERAGE DISCHARGE.--13 years (water years 1975-87), 13.7 ft³/s; 9,930 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 249 ft³/s, June 27, 1983, gage height, 3.46 ft; minimum daily, 0.55 ft³/s, Sept. 10, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 80 ft³/s, and maximum (*) during period October 1987 to February 1988:

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Nov. 29	1000	---	*a2.47	Dec. 3	1800	*7.20	1.83

Minimum daily, 2.2 ft³/s, Jan. 3.
a-Backwater from ice.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.3	3.6	3.6	2.4	2.9	---	---	---	---	---	---	---
2	3.3	4.0	4.0	2.3	2.8	---	---	---	---	---	---	---
3	3.0	3.5	4.7	2.2	2.7	---	---	---	---	---	---	---
4	3.3	3.0	3.3	2.3	2.6	---	---	---	---	---	---	---
5	3.0	2.8	3.5	2.5	2.7	---	---	---	---	---	---	---
6	3.2	3.3	3.3	2.7	2.8	---	---	---	---	---	---	---
7	3.0	3.0	3.5	2.7	2.9	---	---	---	---	---	---	---
8	3.3	2.9	2.9	2.6	2.9	---	---	---	---	---	---	---
9	3.1	2.7	4.5	2.6	2.9	---	---	---	---	---	---	---
10	3.1	2.7	4.7	2.6	2.8	---	---	---	---	---	---	---
11	2.9	2.7	3.8	2.6	2.8	---	---	---	---	---	---	---
12	2.7	3.3	3.5	2.4	2.9	---	---	---	---	---	---	---
13	3.4	3.1	3.3	2.5	2.9	---	---	---	---	---	---	---
14	3.8	2.8	2.9	2.6	2.9	---	---	---	---	---	---	---
15	4.0	2.6	2.6	2.8	2.7	---	---	---	---	---	---	---
16	3.8	2.4	2.6	2.8	2.7	---	---	---	---	---	---	---
17	3.5	2.4	2.8	2.8	2.7	---	---	---	---	---	---	---
18	3.4	2.6	2.9	2.6	2.8	---	---	---	---	---	---	---
19	3.2	2.8	2.9	2.4	2.9	---	---	---	---	---	---	---
20	3.0	2.9	2.7	2.3	2.9	---	---	---	---	---	---	---
21	3.0	3.1	2.6	2.4	2.8	---	---	---	---	---	---	---
22	3.1	3.2	2.7	2.5	2.7	---	---	---	---	---	---	---
23	3.3	3.2	2.8	2.7	2.6	---	---	---	---	---	---	---
24	3.5	3.2	2.7	2.7	2.6	---	---	---	---	---	---	---
25	3.9	3.1	2.6	2.6	2.7	---	---	---	---	---	---	---
26	3.5	3.2	2.4	2.5	2.9	---	---	---	---	---	---	---
27	3.3	3.2	2.5	2.6	3.1	---	---	---	---	---	---	---
28	3.1	3.2	2.6	2.7	3.2	---	---	---	---	---	---	---
29	3.5	3.3	2.6	2.9	3.2	---	---	---	---	---	---	---
30	3.8	3.5	2.6	3.0	---	---	---	---	---	---	---	---
31	3.7	---	2.6	3.1	---	---	---	---	---	---	---	---
TOTAL	103.0	91.3	96.7	80.4	82.0	---	---	---	---	---	---	---
MEAN	3.32	3.04	3.12	2.59	2.83	---	---	---	---	---	---	---
MAX	4.0	4.0	4.7	3.1	3.2	---	---	---	---	---	---	---
MIN	2.7	2.4	2.4	2.2	2.6	---	---	---	---	---	---	---
AC-FT	204	181	192	159	163	---	---	---	---	---	---	---

CAL YR 1987 TOTAL 3851.9 MEAN 10.6 MAX 69 MIN 2.0 AC-FT 7640

09067000 BEAVER CREEK AT AVON, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.-- January 1975 to February 1988 (discontinued).

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)
NOV 1987						
03...	1450	3.56	222	8.2	7.5	9.4

09069000 EAGLE RIVER AT GYPSUM, CO

LOCATION.--Lat 39°39'00", long 106°57'06", Eagle County, Hydrologic Unit 14010003, at bridge at Gypsum, about 400 ft upstream from Gypsum Creek, about 520 ft upstream from bridge on U.S. Highways 6 and 24, and about 550 ft upstream from gaging station.

DRAINAGE AREA.--842 mi².

PERIOD OF RECORD.--April 1947 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1947 to current year.
WATER TEMPERATURE: April 1949 to current year.

REMARKS.--Records of discharge are given for Eagle River below Gypsum (station 09070000), located 550 ft, downstream from Eagle River at Gypsum (station 09069000).

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily, 1,850 microsiemens Aug. 6, 1949; minimum daily, 130 microsiemens June 9, 10, 1976.
WATER TEMPERATURES: Maximum daily, 24°C Aug. 24, 1949 and several days in August, 1988; minimum, 0.0°C on many days during winter months.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum daily, 1,400 microsiemens Dec. 9 and 15; minimum daily, 140 microsiemens June 4, 6, 8, 10 (may have been less during missing days in June).
WATER TEMPERATURES: Maximum daily, 24.0°C several days in August; minimum daily, 0.0°C on many days in December, January and February.

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO
DEC 07...	1600	206	1030	8.1	3.0	11.0	390	120	23	73	2
MAY 11...	1145	420	493	8.5	8.5	11.2	190	56	12	26	0.9
JUN 15...	0910	1680	238	8.1	9.0	9.4	99	30	5.9	8.7	0.4
AUG 11...	0945	182	908	7.9	16.0	8.6	330	100	19	55	1

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)
DEC 07...	3.0	139	250	110	0.30	8.2	674	0.92	375	<1	0.50
MAY 11...	1.8	95	100	35	0.20	6.5	295	0.40	334	9	<0.10
JUN 15...	0.80	60	40	10	0.10	5.4	138	0.19	624	21	<0.10
AUG 11...	2.5	132	200	83	0.10	7.9	548	0.74	269	8	0.20

DATE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHOROUS TOTAL (MG/L AS P)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P)	ANTI-MONY, DIS-SOLVED (UG/L AS SB)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)
DEC 07...	0.58	0.30	0.20	0.80	0.05	0.03	<1	<1	<1	45	<0.5
MAY 11...	<0.10	0.30	0.60	--	0.04	0.01	5	3	<1	59	<0.5
JUN 15...	0.12	0.30	0.20	--	0.02	0.01	<1	<1	<1	38	<0.5
AUG 11...	0.26	0.20	0.30	0.40	0.03	0.03	<1	<1	<1	72	<0.5

09069000 EAGLE RIVER AT GYPSUM, CO.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
DEC 07...	<1	<1	<1	<1	4	2	12	<5	<5	69
MAY 11...	2	<1	2	<1	7	4	68	<5	<5	72
JUN 15...	1	<1	1	<1	7	3	18	7	<5	27
AUG 11...	1	1	<1	<1	3	<1	9	<5	<5	31

DATE	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
DEC 07...	<0.10	<0.1	3	<1	<1	<1	<1	<1.0	50	32
MAY 11...	--	--	3	5	<1	<1	<1	<1.0	160	36
JUN 15...	<0.10	<0.1	4	<1	<1	<1	<1	<1.0	20	26
AUG 11...	<0.10	0.8	<1	<1	<1	<1	<1	<1.0	30	12

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1100	1000	1200	1200	1000	1000	1000	400	220	280	600	1000
2	1100	1000	1300	1100	1000	1000	1000	380	320	300	600	1000
3	1100	1000	1100	1100	1100	---	900	420	240	360	650	---
4	1100	1000	1100	1100	1000	950	900	420	140	380	750	---
5	1100	1000	---	1000	1000	950	900	420	---	380	---	1200
6	1100	1000	---	1100	---	1000	---	420	140	400	---	1100
7	1100	1000	1100	1100	---	1000	800	420	---	400	---	1200
8	1100	1050	1100	1000	---	1000	800	420	140	420	700	1300
9	1000	1000	1400	1100	1000	1000	650	420	---	480	750	1200
10	1100	1000	---	---	1000	1000	650	440	140	480	850	1200
11	1100	1000	1200	1000	1000	1000	650	440	---	480	800	---
12	1100	1100	---	1000	1000	950	600	400	---	500	800	1300
13	1100	1100	---	1000	1000	950	550	380	165	500	850	900
14	1100	1100	---	1100	1000	1100	500	300	240	540	850	800
15	1100	1100	1400	1000	1000	1100	600	300	240	540	850	1000
16	1100	1100	1200	1100	1000	1000	650	200	210	520	800	1000
17	1100	1100	1200	---	1000	1000	650	200	240	---	---	1000
18	1100	1200	1200	950	1000	1000	420	200	220	560	---	1000
19	1050	1200	1200	1000	1000	950	---	200	240	---	850	1000
20	1100	1200	1100	1100	1000	950	---	250	260	600	850	1000
21	1100	1100	1200	---	1000	1000	380	250	---	700	900	1100
22	1100	1100	1200	---	1000	900	---	280	---	---	850	---
23	1050	1100	1200	---	1000	900	---	---	280	---	850	---
24	1050	1100	1100	1000	1000	---	---	220	240	750	950	---
25	1050	1100	1200	1100	1000	---	520	220	---	725	850	900
26	1000	1100	1100	1100	1000	---	520	---	260	750	850	1000
27	1000	1100	1100	1000	1000	1000	520	220	240	700	900	---
28	1000	1100	1100	1000	1000	900	520	---	260	750	950	---
29	1000	1100	1100	1000	1000	900	540	160	260	---	900	1100
30	1000	1200	1100	1000	---	950	520	160	260	---	925	1100
31	1000	---	1100	1000	---	950	---	---	---	680	900	---
MEAN	1070	1080	---	---	---	---	---	---	---	---	---	---

09069000 EAGLE RIVER AT GYPSUM, CO.--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13.0	9.0	.0	.0	.0	1.0	10.0	10.0	9.0	16.0	24.0	20.0
2	13.0	9.0	.0	.0	.0	2.0	10.0	8.0	---	16.0	24.0	20.0
3	13.0	9.0	.0	.0	.0	---	10.0	12.0	---	17.0	---	---
4	13.0	9.0	3.0	.0	.0	7.0	10.0	12.0	---	16.0	23.0	---
5	13.0	8.0	---	.0	.0	6.0	10.0	11.0	---	17.0	---	20.0
6	13.0	8.0	---	.0	---	5.0	---	10.0	10.0	16.0	---	20.0
7	12.0	7.0	3.0	.0	---	5.0	12.0	10.0	---	16.0	---	20.0
8	11.0	7.0	2.0	.0	---	5.0	12.0	10.0	13.0	16.0	24.0	20.0
9	10.0	6.0	1.0	.0	.0	3.0	11.0	12.0	---	18.0	20.0	20.0
10	11.0	6.0	---	---	.0	3.0	11.0	12.0	13.0	18.0	23.0	17.0
11	12.0	4.0	.0	.0	.0	1.0	11.0	13.0	---	19.0	24.0	---
12	10.0	2.0	---	.0	.0	4.0	12.0	15.0	---	20.0	24.0	10.0
13	10.0	.0	---	.0	.0	4.0	12.0	14.0	10.0	19.0	22.0	8.0
14	10.0	.0	---	.0	.0	5.0	11.0	12.0	7.0	19.0	23.0	15.0
15	10.0	3.0	.0	.0	.0	5.0	11.0	12.0	16.0	19.0	23.0	14.0
16	10.0	3.0	.0	.0	.0	7.0	10.0	11.0	13.0	19.0	22.0	14.0
17	10.0	3.0	.0	---	.0	7.0	10.0	11.0	13.0	---	---	14.0
18	10.0	.0	.0	.0	.0	8.0	12.0	11.0	11.0	19.0	---	14.0
19	9.0	.0	.0	.0	.0	8.0	---	11.0	13.0	---	19.0	14.0
20	9.0	.0	.0	.0	.0	8.0	---	10.0	16.0	19.0	20.0	15.0
21	8.0	1.0	.0	---	.0	10.0	9.0	10.0	---	20.0	22.0	15.0
22	8.0	1.0	.0	---	.0	8.0	---	10.0	---	---	19.0	---
23	8.0	1.0	.0	---	1.0	8.0	---	---	16.0	---	22.0	---
24	8.0	1.0	.0	.0	1.0	---	--	11.0	16.0	20.0	22.0	---
25	8.0	1.0	.0	.0	1.0	---	12.0	11.0	---	23.0	20.0	15.0
26	8.0	1.0	.0	.0	.0	---	12.0	---	15.0	23.0	20.0	15.0
27	8.0	1.0	.0	.0	.0	5.0	12.0	11.0	15.0	22.0	22.0	---
28	9.0	1.0	.0	.0	1.0	6.0	12.0	---	16.0	23.0	18.0	---
29	9.0	1.0	.0	.0	1.0	6.0	12.0	7.0	16.0	---	22.0	15.0
30	9.0	.0	.0	.0	---	5.0	12.0	8.0	16.0	---	22.0	15.0
31	9.0	---	.0	.0	---	5.0	---	---	---	21.0	22.0	---
MEAN	10.1	3.4	---	---	---	---	---	---	---	---	---	---

09070000 EAGLE RIVER BELOW GYPSUM, CO

LOCATION.--Lat 39°38'58", long 106°57'11", in SW¼NW¼ sec.5, T.5 S., R.85W., Eagle County, Hydrologic Unit 14010003, on right bank 30 ft downstream from bridge on U.S. Highways 6 and 24 at Gypsum and 150 ft downstream from Gypsum Creek.

DRAINAGE AREA.--945 mi² (revised).

PERIOD OF RECORD.--October 1946 to current year.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 6,275.11 ft, above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Dec. 28 to Jan. 26. Records good except for estimated daily discharges, which are fair. Transmountain diversions upstream from station (see elsewhere in this report). Transbasin diversions upstream from station from Robinson Reservoir, capacity, 2,520 acre-ft, to Tenmile Creek for mining development. Many small diversions for irrigation of hay meadows upstream from station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--42 years, 581 ft³/s; 420,900 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,020 ft³/s, May 25, 1984, gage height, 9.46 ft; minimum daily, 110 ft³/s, Feb. 21, 1955, Feb. 3, 1956, Dec. 26, 27, 1962.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,500 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
June 7	0600	*2,920	*6.68				

Minimum daily, 132 ft³/s, Dec. 15.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	184	228	183	170	179	183	181	633	1310	931	322	155
2	182	250	205	160	177	192	187	595	1170	822	265	154
3	181	248	209	150	179	190	195	498	1530	759	235	153
4	180	234	209	140	174	185	208	473	2100	738	220	152
5	178	224	207	160	166	169	220	510	2600	732	204	152
6	174	226	206	160	174	178	217	615	2500	749	192	149
7	174	236	205	150	182	186	242	567	2610	692	197	147
8	174	236	204	160	184	169	302	534	2470	635	204	145
9	179	217	184	150	182	176	307	482	2530	586	190	144
10	184	201	204	160	177	180	267	451	2510	535	178	146
11	185	209	209	170	173	174	268	424	2430	504	178	154
12	184	208	190	150	177	166	292	500	2130	468	176	197
13	188	201	157	140	175	166	349	741	1980	440	178	230
14	206	208	137	140	180	157	418	1140	1590	446	174	226
15	224	222	132	150	177	168	438	1430	1570	428	167	206
16	229	217	133	160	176	171	435	1620	1530	416	163	190
17	234	212	153	150	169	166	500	1730	1550	388	178	182
18	226	183	169	160	166	159	466	1800	1540	364	182	180
19	224	183	200	150	174	163	482	1960	1600	342	177	177
20	220	212	192	140	178	175	473	1530	1760	323	168	178
21	216	227	170	150	175	183	541	1170	1720	287	169	177
22	215	230	168	150	171	192	518	945	1660	263	179	177
23	214	232	190	160	170	193	455	802	1490	245	182	177
24	216	224	184	150	171	198	406	797	1480	235	174	174
25	235	206	176	150	172	184	382	1000	1380	224	167	171
26	240	213	156	170	174	183	361	1170	1350	217	159	169
27	228	215	178	173	177	207	361	1340	1240	217	163	166
28	220	189	170	173	188	231	356	1470	1140	210	170	161
29	217	190	170	176	189	191	391	1740	1350	229	164	165
30	224	196	160	182	---	204	448	1980	1100	255	160	167
31	234	---	170	179	---	192	---	1550	---	287	160	---
TOTAL	6369	6477	5580	4883	5106	5641	10666	32202	52920	13967	5795	5121
MEAN	205	216	180	158	176	182	356	1039	1764	451	187	171
MAX	240	250	209	182	189	231	541	1980	2610	931	322	230
MIN	174	183	132	140	166	157	181	424	1100	210	159	144
AC-FT	12630	12850	11070	9690	10130	11190	21160	63870	105000	27700	11490	10160

CAL YR 1987 TOTAL 162970 MEAN 446 MAX 2470 MIN 132 AC-FT 323300
WTR YR 1988 TOTAL 154727 MEAN 423 MAX 2610 MIN 132 AC-FT 306900

09070500 COLORADO RIVER NEAR DOTSERO, CO

LOCATION.--Lat 39°38'38", long 107°04'38", in NW¼SE¼ sec.6, T.5 S., R.86 W., Eagle County, Hydrologic Unit 14010001, on left bank about 500 ft south of Interstate Highway 70, 1.5 mi west of Dotsero, and 1.5 mi downstream from Eagle River.

DRAINAGE AREA.--4,394 mi².

PERIOD OF RECORD.--October 1940 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,130 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 21, 28, Nov. 1, 2, 9, [illegible], and Nov. 14 to Feb. [illegible]. Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by transmountain diversions, storage reservoirs, power development, diversions for irrigation of [illegible] acres upstream from station, and return flow from irrigated areas.

COOPERATION.--Gage-height record collected in cooperation with the Colorado Division of Water Resources.

AVERAGE DISCHARGE.--48 years, 2,152 ft³/s; 1,559,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 22,200 ft³/s, May [illegible], [illegible], gage height, [illegible] ft; minimum daily, 350 ft³/s, Jan. 5, 1944.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,300 ft³/s at 1115 June 7, gage height, [illegible] ft; minimum daily, 790 ft³/s, Dec. 15.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1230	1100	1000	1040	1060	1050	1070	2830	[illegible]	[illegible]	[illegible]	[illegible]
2	1220	1130	1000	1000	1050	1050	1050	3010	[illegible]	[illegible]	[illegible]	[illegible]
3	1230	1160	1030	940	1020	1020	1140	3610	3420	[illegible]	[illegible]	[illegible]
4	1230	1170	1100	940	1000	1070	1170	3370	[illegible]	[illegible]	[illegible]	[illegible]
5	1240	1140	1100	1000	1000	1010	1570	3400	[illegible]	[illegible]	[illegible]	[illegible]
6	1220	1130	1080	1000	1000	1030	1570	3430	[illegible]	[illegible]	[illegible]	[illegible]
7	1210	1190	1030	1030	1050	1020	1460	[illegible]	[illegible]	[illegible]	[illegible]	1150
8	1210	1190	1000	1050	1050	987	1910	2910	[illegible]	[illegible]	[illegible]	1140
9	1220	1120	960	1030	1020	1020	1950	2940	[illegible]	[illegible]	[illegible]	[illegible]
10	1230	1180	1000	1020	1000	1050	1770	[illegible]	[illegible]	[illegible]	[illegible]	1340
11	1230	1130	960	1000	1000	1000	1670	[illegible]	[illegible]	[illegible]	[illegible]	1210
12	1240	1080	930	960	1050	967	1620	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
13	1250	1120	820	940	1000	943	1970	2950	[illegible]	[illegible]	[illegible]	1500
14	1280	1130	800	960	1050	905	2070	2750	[illegible]	[illegible]	[illegible]	[illegible]
15	1260	1180	790	1000	1000	1040	2410	4020	[illegible]	[illegible]	[illegible]	[illegible]
16	1210	1100	800	1000	1000	1020	2400	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
17	1200	1080	880	1020	930	996	2690	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
18	1190	1050	940	1000	980	[illegible]	2670	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
19	1170	1060	1000	930	970	[illegible]	2570	[illegible]	[illegible]	[illegible]	[illegible]	1160
20	1120	1100	930	960	937	991	2640	3480	[illegible]	[illegible]	[illegible]	1170
21	1100	1180	930	960	1000	1020	2790	5130	[illegible]	[illegible]	[illegible]	1170
22	1040	1200	980	980	1000	1060	2760	4300	[illegible]	[illegible]	[illegible]	1170
23	1010	1200	1060	930	1010	1050	2400	3710	[illegible]	[illegible]	[illegible]	1160
24	1010	1200	1000	1000	1010	1090	2330	3540	[illegible]	[illegible]	[illegible]	1120
25	972	1200	930	1000	1020	1050	2070	4020	[illegible]	[illegible]	[illegible]	1100
26	996	1120	930	1000	1070	1090	2000	3310	[illegible]	[illegible]	[illegible]	1090
27	983	1100	960	1000	1040	1120	1940	4050	[illegible]	[illegible]	[illegible]	1050
28	960	1100	1000	1020	1060	1280	1910	4410	[illegible]	[illegible]	1400	1070
29	935	1100	1000	1030	1050	1220	1970	4980	3270	[illegible]	[illegible]	1050
30	950	1050	1020	1060	---	1190	2220	5470	3460	[illegible]	1330	1050
31	1000	---	1000	1030	---	1130	---	4910	---	[illegible]	[illegible]	---
TOTAL	35336	33990	29980	30980	29557	32505	60200	118180	123370	61400	45300	36640
MEAN	1140	1133	967	999	1019	1049	2007	3312	4112	1980	1462	1221
MAX	1280	1200	1100	1080	1080	1280	2790	6030	5850	3460	1630	1500
MIN	935	1050	790	940	970	905	1070	2300	2330	[illegible]	[illegible]	1050
AC-FT	70090	67420	59470	61450	58630	64470	119400	234400	244700	121900	[illegible]	72680

CAL YR 1987 TOTAL 604616 MEAN 1656 MAX 5470 MIN 790 AC-FT 1199000
WTR YR 1988 TOTAL 637538 MEAN 1742 MAX 6030 MIN 790 AC-FT 1265000

09071300 GRIZZLY CREEK NEAR GLENWOOD SPRINGS, CO

LOCATION.--Lat 39°43'00", long 107°18'35", in NE¼SW¼ sec.7, T.4 S., R.88 W., Garfield County, Hydrologic Unit 14010001, on left bank 0.5 mi west of Grizzly Cow Camp and 14 mi north of Glenwood Springs.

DRAINAGE AREA.--5.73 mi².

PERIOD OF RECORD.--September 1976 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 10,435 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Oct. 19, 1978, at site 600 ft upstream, at datum, 25.33 ft, higher.

REMARKS.--Estimated daily discharges: Dec. 22-24, May 16-24. Records good except for estimated daily discharges, which are fair. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--12 years, 14.8 ft³/s; 10,720 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 364 ft³/s, June 5, 1986, gage height, 4.99 ft, maximum gage height observed, 8.63 ft, May 4, 1982 (backwater from ice); no flow many days most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 85 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
May 13	1600	---	*a7.04	June 6	2200	*165	4.63
May [illegible]	1600	133	4.43				

No flow many days.
a Backwater from ice.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.86	.97	.68	.27	.00	.00	.00	.55	66	7.7	1.8	1.1
2	.97	.97	.70	.15	.00	.00	.00	.56	57	6.8	2.0	1.0
3	1.0	.91	.68	.21	.00	.00	.00	.57	76	6.1	2.0	1.3
4	1.0	.86	.62	.21	.00	.00	.00	.66	106	5.7	1.8	1.1
5	1.0	.86	.61	.21	.00	.00	.00	.71	130	5.1	1.5	1.0
6	.93	.84	.61	.21	.00	.00	.00	.82	152	5.0	1.6	.91
7	.91	.80	.60	.21	.00	.00	.00	1.0	155	4.5	1.7	.92
8	.91	.90	.56	.21	.00	.00	.00	1.2	147	3.8	1.7	.89
9	.91	.85	.56	.21	.00	.00	.00	1.3	136	3.9	1.7	1.2
10	.91	.76	.55	.21	.00	.00	.00	1.3	129	3.8	1.5	1.7
11	.90	.70	.59	.18	.00	.00	.00	1.4	118	3.7	1.3	1.6
12	.95	.71	.58	.13	.00	.00	.00	1.7	105	3.7	1.2	2.1
13	1.0	.77	.51	.16	.00	.00	.10	2.3	82	4.6	1.2	2.1
14	1.2	.79	.45	.16	.00	.00	.10	3.3	53	3.1	1.2	1.7
15	1.2	.82	.43	.16	.00	.00	.13	5.7	49	2.6	1.1	1.6
16	1.1	.86	.40	.16	.00	.00	.18	6.8	41	2.9	1.3	1.6
17	.97	.79	.38	.16	.00	.00	.24	8.6	37	3.1	1.4	1.9
18	.94	.73	.38	.16	.00	.00	.21	10	33	2.4	1.2	2.0
19	.91	.68	.38	.14	.00	.00	.21	15	26	2.1	1.2	1.9
20	1.0	.66	.35	.13	.00	.00	.21	18	24	2.0	1.2	1.9
21	.84	.66	.35	.13	.00	.00	.27	30	22	1.9	1.4	2.1
22	.84	.63	.33	.13	.00	.00	.30	51	21	1.9	1.7	2.2
23	.80	.61	.35	.13	.00	.00	.30	61	16	2.0	1.3	2.1
24	.79	.61	.34	.13	.00	.00	.30	56	14	2.3	1.3	1.9
25	.88	.61	.32	.00	.00	.00	.30	82	13	1.8	1.3	1.7
26	.85	.61	.32	.00	.00	.00	.30	113	12	2.0	1.2	1.7
27	.89	.61	.30	.00	.00	.00	.34	114	12	2.0	1.2	1.6
28	.84	.61	.27	.00	.00	.00	.35	118	12	2.0	1.1	1.6
29	.79	.63	.27	.00	.00	.00	.35	123	10	1.9	1.1	1.6
30	.81	.66	.27	.00	---	.00	.45	119	8.7	1.8	1.0	1.5
31	.86	---	.27	.00	---	.00	---	100	---	1.8	1.0	---
TOTAL	28.76	22.47	14.01	4.16	0.00	0.00	4.64	1048.47	1862.7	104.0	43.2	47.52
MEAN	.93	.75	.45	.13	.00	.00	.15	33.8	62.1	3.35	1.39	1.58
MAX	1.2	.97	.70	.27	.00	.00	.45	123	155	7.7	2.0	2.2
MIN	.79	.61	.27	.00	.00	.00	.00	.55	8.7	1.8	1.0	.89
AC-FT	57	45	28	8.3	.0	.0	9.2	2080	3690	206	86	94

CAL YR 1987 TOTAL 4648.76 MEAN 12.7 MAX 164 MIN .27 AC-FT 9220
WTR YR 1988 TOTAL 3179.93 MEAN 8.69 MAX 155 MIN .00 AC-FT 6310

09071750 COLORADO RIVER ABOVE GLENWOOD SPRINGS,CO

LOCATION.--Lat 39°33'38", long 107°17'59", Garfield County, Hydrologic Unit 14010001, 100 yards downstream of No Name Creek and two miles above Glenwood Springs.

DRAINAGE AREA.--4,556 mi².

PERIOD OF RECORD.--December 1985 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: December 1985 to current year.
WATER TEMPERATURE: December 1985 to current year.

INSTRUMENTATION.--Water-quality monitor since December 1985.

REMARKS.--Discharge obtained by subtracting the flow in Roaring Fork River at Glenwood Springs (station 09085000) from the flow in the Colorado River below Glenwood Springs (station 09085100). Water-quality data collection was moved downstream to this site from previous site 09071100 on Dec.12,1985. Water-quality data collected at this site are considered equivalent to data collected at old site. Daily maximum and minimum specific-conductance data available in district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 806 microsiemens Aug.21, 1986; minimum, 228 microsiemens June 10, 1986.
WATER TEMPERATURE: Maximum, 22.5°C July 26, 1987; minimum, 0.0°C many days in winter period, 1986.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 878 microsiemens Dec. 1; minimum recorded, 253 microsiemens June 9 (but may have been less during period of missing record May 17-June 8).
WATER TEMPERATURE: Maximum 21.3°C August 4; minimum, 0.0°C many days during winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO
OCT											
08...	1230	E1250	632	8.1	13.0	200	97	61	11	61	2
NOV											
05...	1420	E1220	730	--	7.5	200	84	59	12	61	2
DEC											
09...	1010	E980	782	--	1.0	200	89	61	12	74	2
JAN											
11...	1620	E1090	713	--	0.5	190	83	57	12	66	2
FEB											
24...	1505	E256	705	--	2.5	200	90	60	13	64	2
MAR											
30...	0910	E1330	643	--	4.0	170	68	50	11	58	2
MAY											
04...	0830	E2650	433	--	7.5	130	44	39	8.7	29	1
JUN											
03...	1045	E4200	341	--	12.0	110	32	33	7.4	21	0.9
JUL											
14...	0910	E1890	615	8.4	18.5	190	81	56	12	47	2
AUG											
12...	1020	E1560	558	7.8	19.0	150	62	47	9.1	44	2
SEP											
15...	0930	E1560	678	8.1	12.5	190	88	55	12	55	2

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)
OCT										
08...	3.2	101	100	85	0.40	6.1	389	0.53	1310	0.140
NOV										
05...	2.6	113	100	91	0.30	9.0	403	0.55	1320	<0.100
DEC										
09...	2.9	113	110	100	0.30	9.7	438	0.60	1160	0.130
JAN										
11...	2.9	109	91	99	0.30	10	405	0.55	1190	0.240
FEB										
24...	3.2	114	89	90	0.50	9.2	398	0.54	274	0.160
MAR										
30...	2.9	102	84	78	0.30	9.0	358	0.49	1280	0.880
MAY										
04...	2.0	89	58	36	0.30	10	236	0.32	1680	<0.100
JUN										
03...	1.4	81	46	25	0.30	8.5	191	0.26	2160	<0.100
JUL										
14...	2.3	109	91	61	0.20	9.4	344	0.47	1750	<0.100
AUG										
12...	2.3	93	77	66	0.30	8.3	310	0.42	1300	<0.100
SEP										
15...	2.6	99	91	76	0.30	8.4	360	0.49	1510	<0.100

E Estimated.

09071750 COLORADO RIVER ABOVE GLENWOOD SPRINGS, CO--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	627	725	858	793	---	---	632	422	---	474	585	---
2	625	729	855	775	---	680	630	415	---	484	558	---
3	634	712	843	745	---	678	629	405	---	495	545	---
4	635	723	796	740	---	673	631	401	---	508	558	---
5	632	716	777	740	---	668	621	397	---	509	573	---
6	629	729	761	739	---	671	599	390	---	523	579	---
7	628	726	758	743	---	675	594	382	---	536	576	---
8	621	732	759	715	---	669	595	379	---	548	566	---
9	643	722	778	712	---	672	584	379	258	557	560	---
10	663	721	833	699	---	674	568	380	261	565	560	---
11	649	726	822	686	---	679	557	380	268	577	563	---
12	639	729	823	703	---	683	547	379	280	589	559	---
13	[illegible]	[illegible]	---	806	---	696	542	374	294	602	550	---
14	634	[illegible]	---	841	---	---	524	359	304	609	546	---
15	629	735	---	849	---	681	500	338	318	602	538	---
16	644	739	---	809	---	---	464	313	327	596	524	---
17	[illegible]	743	---	774	---	680	452	---	356	588	532	---
18	691	747	---	767	---	---	444	---	382	577	533	---
19	631	---	---	774	---	---	435	---	403	---	540	---
20	691	747	819	794	---	---	429	---	404	---	543	---
21	---	797	837	813	---	---	425	---	397	764	---	---
22	---	793	806	829	---	---	421	---	408	742	---	---
23	---	787	832	839	---	699	420	---	420	699	---	---
24	---	[illegible]	[illegible]	833	---	699	418	---	420	657	---	---
25	---	[illegible]	[illegible]	823	---	689	413	---	402	628	---	---
26	---	776	796	837	---	688	418	---	414	604	---	---
27	---	[illegible]	816	835	---	690	416	---	427	581	---	---
28	---	813	751	829	---	683	416	---	438	578	---	---
29	---	---	751	809	---	651	416	---	447	583	---	---
30	---	[illegible]	721	---	---	635	416	---	461	589	---	---
31	---	---	789	---	---	633	---	---	---	590	---	---
MEAN	---	---	---	---	---	---	505	---	---	---	---	---

09071750 COLORADO RIVER ABOVE GLENWOOD SPRINGS,CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	14.2	11.6	9.2	6.2	.4	.0	.4	.4	.2	.0	---	---
2	13.9	11.2	9.0	8.1	.9	.1	.4	.0	.4	.0	3.7	2.5
3	14.3	11.2	9.1	7.7	.9	.2	.1	.0	.4	.0	3.9	2.3
4	13.7	11.1	8.4	6.6	1.3	.6	.0	.0	.4	.0	3.7	2.0
5	13.2	11.1	7.6	6.1	1.9	1.2	.0	.0	.4	.4	3.1	1.4
6	13.8	11.0	7.5	6.6	2.4	1.6	.0	.0	.4	.4	3.4	1.9
7	13.3	10.6	7.4	6.3	2.4	1.3	.4	.0	.4	.0	3.4	1.6
8	13.2	10.6	6.6	5.5	1.9	1.1	.0	.0	.3	.0	---	---
9	12.3	10.1	5.9	4.4	1.4	.4	.0	.0	.5	.0	3.9	1.4
10	12.2	10.6	5.0	3.9	1.5	.6	.0	.0	.5	.0	3.4	1.9
11	12.2	10.5	5.1	4.2	2.6	1.7	.0	.0	.9	.0	2.6	1.2
12	11.4	10.3	4.9	4.0	2.7	.1	.0	.0	.9	.0	---	---
13	11.4	10.9	4.7	4.1	.4	.0	.4	.0	.6	.0	---	---
14	11.0	10.2	5.3	4.7	.4	.0	.0	.0	.6	.0	---	---
15	11.9	10.3	5.2	4.4	.0	.0	.4	.0	.9	.0	---	---
16	11.7	9.7	4.4	2.8	.4	.0	.0	.0	.9	.1	3.3	1.6
17	10.8	8.7	2.8	1.5	.4	.0	.4	.0	.8	.0	2.7	1.3
18	10.1	7.2	1.4	.0	.0	.0	.4	.0	.9	.0	---	---
19	9.7	7.6	2.0	.0	.4	.0	.0	.0	.9	.0	---	---
20	8.7	6.1	.5	.0	.0	.0	.0	.0	1.4	.2	---	---
21	---	---	.6	.1	.0	.0	.0	.0	---	---	6.6	3.8
22	---	---	.9	.4	.0	.0	.0	.0	---	---	7.6	4.8
23	---	---	1.4	.8	.1	.0	.0	.0	---	---	7.3	5.5
24	---	---	1.7	.9	.0	.0	.0	.0	---	---	7.3	5.2
25	---	---	1.2	.1	.0	.0	.0	.0	---	---	6.9	5.6
26	---	---	1.5	.4	.0	.0	.0	.0	---	---	8.0	5.6
27	---	---	1.6	.6	.4	.0	.4	.0	---	---	9.0	6.6
28	---	---	.9	.0	.4	.0	.0	.0	---	---	7.2	4.9
29	---	---	1.6	.0	.0	.0	.0	.0	---	---	5.0	3.2
30	---	---	.4	.0	.4	.0	.0	.0	---	---	4.4	3.0
31	---	---	---	---	.4	.0	.1	.0	---	---	3.9	3.0
MONTH	---	---	9.2	.0	2.7	.0	.4	.0	---	---	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	5.3	3.2	10.7	8.7	11.2	9.8	18.0	16.4	19.2	18.1	18.1	16.2
2	7.8	4.4	8.6	7.2	13.7	10.4	---	---	19.1	17.8	17.0	15.9
3	8.2	5.5	7.8	6.3	14.4	12.1	---	---	20.4	19.1	---	---
4	7.8	6.9	8.5	7.4	14.4	12.8	17.6	16.0	21.3	19.8	19.0	15.9
5	8.7	7.4	9.7	8.0	14.3	12.4	16.9	16.2	20.9	19.3	19.2	15.1
6	8.0	7.0	9.7	8.2	13.0	11.0	---	---	20.4	18.8	---	---
7	9.0	7.7	8.0	6.6	12.9	11.6	---	---	19.6	18.6	---	---
8	9.6	8.4	8.6	6.9	13.7	11.6	---	---	19.6	18.5	---	---
9	8.4	5.8	8.5	7.2	14.2	12.2	19.2	17.3	19.4	18.0	---	---
10	5.7	4.4	9.6	8.4	14.2	12.6	17.8	16.0	19.1	17.8	16.5	14.4
11	6.8	5.4	10.5	8.7	13.5	12.4	---	---	19.6	18.1	15.4	13.7
12	8.6	6.8	11.8	9.8	13.5	11.4	---	---	19.4	18.3	13.8	12.2
13	9.6	8.5	12.7	11.0	13.4	11.8	---	---	18.5	17.4	12.3	10.6
14	9.6	7.9	12.8	11.6	14.1	11.2	---	---	18.7	17.6	12.6	11.4
15	8.9	7.9	12.7	11.1	14.4	12.9	---	---	19.0	18.3	12.9	11.9
16	8.9	7.1	12.1	10.6	14.7	13.4	---	---	19.3	18.5	12.9	11.9
17	8.6	7.8	11.4	10.7	15.2	13.4	---	---	19.2	17.9	14.2	12.9
18	8.6	6.5	10.8	9.9	15.2	13.7	---	---	17.9	16.7	14.9	12.9
19	9.2	7.9	10.5	8.7	16.9	14.5	---	---	18.3	16.9	13.5	11.1
20	9.3	7.9	8.7	8.0	16.8	15.0	---	---	18.7	16.5	---	---
21	9.3	8.1	8.2	6.7	17.3	15.9	---	---	18.5	16.1	13.1	11.6
22	7.9	6.8	9.9	7.7	17.5	15.5	---	---	18.6	16.4	14.1	11.2
23	7.5	6.3	10.7	8.4	17.5	16.3	---	---	19.3	17.4	---	---
24	7.5	6.5	12.0	10.1	18.0	16.5	---	---	19.9	18.3	14.1	12.3
25	7.5	6.6	12.6	11.0	18.1	17.0	---	---	---	---	---	---
26	7.0	5.6	12.1	10.8	17.7	16.8	---	---	19.8	17.6	13.2	12.0
27	8.3	6.8	12.5	10.3	17.5	16.1	---	---	18.4	17.0	13.0	11.6
28	8.9	7.8	12.8	10.7	17.6	16.2	19.6	17.9	17.7	16.4	13.0	10.8
29	9.7	8.6	12.6	11.1	17.2	16.9	19.7	18.0	---	---	11.7	9.6
30	10.7	9.3	12.1	10.2	18.0	16.0	20.2	18.7	18.2	16.7	11.2	9.7
31	---	---	10.9	9.0	---	---	19.9	18.8	17.2	16.3	---	---
MONTH	10.7	3.2	12.8	6.3	18.1	9.8	---	---	---	---	---	---

09073300 ROARING FORK RIVER ABOVE DIFFICULT CREEK NEAR ASPEN, CO

LOCATION.--Lat 39°08'28", long 106°46'25", Pitkin County, Hydrologic Unit 14010004, on left bank in the White River National Forest at Difficult Creek Campground, 0.45 mi above Difficult Creek tributary and 4.25 mi southeast of Aspen.

DRAINAGE AREA.--75.8 mi².

PERIOD OF RECORD.--October 1979 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 8,120 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 1-5, Nov. 18, 19, 25, 28, Dec. 1, 9, 13-18, 26-28, Jan. 13, 14, 20, 21, Feb. 4, 5, 18, Mar. 5, 14, 18, 29, and Apr. 1. Records fair except for estimated daily discharges, which are poor. Transmountain diversion 11 mi upstream through Twin Lakes Tunnel to Arkansas River basin since May 24, 1935 (32,450 acre-ft diverted, during current year, provided by U.S. Bureau of Reclamation). Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--9 years, 138 ft³/s; 100,000 acre-ft/yr, including diversion by Twin Lakes tunnel.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,350 ft³/s, June 8, 1985, gage height, 5.10 ft, from rating curve extended above 910 ft³/s; minimum daily, 8.0 ft³/s, Jan. 11, 1980.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 455 ft³/s at 2400 June 6, gage height, 3.17 ft; minimum daily, 14 ft³/s, Dec. 15, 16, Jan. 13.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	23	18	19	16	18	20	51	118	83	82	30
2	18	21	18	17	16	18	21	41	132	77	75	29
3	18	20	18	17	16	18	22	37	166	73	71	29
4	18	20	18	17	15	18	22	36	203	68	67	28
5	18	20	18	17	16	17	23	40	252	65	64	28
6	18	21	18	17	17	18	28	44	284	65	62	28
7	18	22	18	17	17	19	31	39	319	64	54	28
8	18	22	19	17	17	17	35	40	293	58	51	27
9	18	21	17	16	17	18	32	37	260	52	48	26
10	18	25	20	16	17	18	29	36	262	49	41	26
11	19	23	20	16	17	18	30	37	228	53	39	28
12	19	23	20	16	17	19	35	50	211	46	36	32
13	19	24	17	14	17	18	42	71	180	47	35	39
14	19	23	15	15	17	17	45	97	161	65	34	38
15	19	23	14	16	17	19	46	132	158	64	32	35
16	19	21	14	16	17	19	45	140	143	62	32	36
17	19	20	16	16	17	18	51	141	130	58	36	37
18	18	19	18	16	16	18	46	166	123	53	37	38
19	18	18	19	16	17	19	49	152	163	52	38	40
20	18	20	19	15	17	19	47	116	172	47	37	42
21	18	20	18	16	17	19	52	93	192	46	39	43
22	21	21	18	17	17	20	45	78	174	42	47	43
23	21	19	18	17	17	20	41	71	151	41	41	43
24	21	19	18	16	17	20	37	84	140	39	38	40
25	21	18	18	16	16	19	34	90	128	37	35	40
26	21	19	17	16	17	19	32	119	113	36	32	33
27	21	19	16	16	17	20	31	143	100	41	31	31
28	21	18	18	16	17	22	32	172	95	40	30	31
29	22	18	20	16	17	22	35	176	110	66	30	31
30	23	18	19	16	---	21	40	172	97	69	30	30
31	24	---	19	16	---	20	---	138	---	86	30	---
TOTAL	602	618	553	504	485	584	1078	2839	5258	1744	1354	1009
MEAN	19.4	20.6	17.8	16.3	16.7	18.8	35.9	91.6	175	56.3	43.7	33.6
MAX	24	25	20	19	17	22	52	176	319	86	82	43
MIN	18	18	14	14	15	17	20	36	95	36	30	26
AC-FT	1190	1230	1100	1000	962	1160	2140	5630	10430	3460	2690	2000

CAL YR 1987 TOTAL 39852 MEAN 109 MAX 1260 MIN 14 AC-FT 79050
WTR YR 1988 TOTAL 16628 MEAN 45.4 MAX 319 MIN 14 AC-FT 32980

09073400 ROARING FORK RIVER NEAR ASPEN, CO

LOCATION.--Lat 39°10'48", long 106°48'05", Pitkin County, Hydrologic Unit 14010004, on right bank 25 ft upstream from private bridge, 115 ft upstream from Salvation ditch headgate, 1.0 mi southeast of Aspen, and 2.0 mi upstream from Hunter Creek.

DRAINAGE AREA.--108 mi².

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder. Datum of gage is 8,014.01 ft above National Geodetic Vertical Datum of 1929. Prior to Apr. 25, 1968, at site 85 ft upstream at datum 1.16 ft, higher.

REMARKS.--Estimated daily discharges: Jan. 2, 3, 19-21, 25, 26, Feb. 4-7, and Feb. 17-19. Records good except for estimated daily discharges, which are poor. Transmountain diversion 14 mi upstream through Twin Lakes tunnel to Arkansas River basin since May 24, 1935 (32,420 acre-ft diverted, current year, provided by U.S. Bureau of Reclamation). Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--24 years, 149 ft³/s; 108,000 acre-ft/yr, including diversion by Twin Lakes tunnel.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,230 ft³/s, June 9, 1985, gage height, 5.29 ft; minimum daily, 12 ft³/s, Nov. 28, 1976.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 508 ft³/s at 0100 June 10, gage height, 2.74 ft; minimum daily, 25 ft³/s, Jan. 20.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	41	38	29	33	34	31	92	186	153	102	41
2	37	42	38	29	33	34	32	76	189	138	89	41
3	37	39	39	32	32	34	33	72	250	129	85	40
4	37	37	38	29	28	33	35	71	318	132	82	40
5	36	37	38	29	29	33	35	76	379	119	77	39
6	36	39	37	29	31	34	36	88	406	114	73	38
7	36	41	37	28	32	34	43	76	425	103	69	38
8	36	39	36	28	33	34	51	76	412	94	65	38
9	36	35	38	28	34	34	47	69	410	87	62	37
10	39	37	38	28	34	34	43	71	416	85	54	37
11	38	39	38	28	34	33	46	73	389	99	51	45
12	37	35	36	27	33	32	52	98	358	81	50	54
13	37	38	34	28	33	31	62	141	321	74	49	64
14	40	38	35	29	34	33	69	185	266	93	46	57
15	41	37	32	28	35	32	72	208	267	88	45	50
16	41	35	33	28	34	32	68	237	274	85	47	52
17	39	34	35	29	32	33	73	257	264	84	52	52
18	39	35	35	29	30	31	68	296	252	74	54	52
19	38	32	35	28	34	32	69	267	293	72	51	55
20	36	36	34	25	36	32	70	205	277	66	50	56
21	35	38	33	28	35	33	79	164	308	63	52	56
22	36	39	35	30	35	32	69	143	264	59	67	58
23	37	38	35	31	36	32	65	129	249	58	55	56
24	38	38	33	31	35	33	62	144	231	56	52	53
25	41	37	33	28	35	33	56	154	214	54	49	49
26	41	38	33	31	35	32	54	165	199	55	44	45
27	40	38	32	32	35	34	56	203	183	60	45	43
28	39	36	32	31	36	38	57	224	171	55	44	42
29	41	38	33	31	34	32	60	268	206	82	42	41
30	41	37	33	33	---	34	72	277	186	92	41	41
31	41	---	32	33	---	32	---	212	---	114	41	---
TOTAL	1184	1123	1088	907	970	1024	1665	4817	8563	2718	1785	1410
MEAN	38.2	37.4	35.1	29.3	33.4	33.0	55.5	155	285	87.7	57.6	47.0
MAX	41	42	39	33	36	38	79	296	425	153	102	64
MIN	35	32	32	25	28	31	31	69	171	54	41	37
AC-FT	2350	2230	2160	1800	1920	2030	3300	9550	16980	5390	3540	2800

CAL YR 1987 TOTAL 49179 MEAN 135 MAX 1190 MIN 29 AC-FT 97550
WTR YR 1988 TOTAL 27254 MEAN 74.5 MAX 425 MIN 25 AC-FT 54060

09074000 HUNTER CREEK NEAR ASPEN, CO

LOCATION.--Lat 39°12'21", long 106°47'49", Pitkin County, Hydrologic Unit 14010004, on right bank 280 ft upstream from headgate of Red Mountain ditch, 1.5 mi upstream from mouth, and 1.5 mi northeast of Aspen.

DRAINAGE AREA.--41.1 mi^2.

PERIOD OF RECORD.--June 1950 to September 1956, September 1969 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 8,610 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Sept. 1, 1969, at site 220 ft downstream, at different datum.

REMARKS.--Estimated daily discharges: Nov. 16-21, and Jan. 22 to Apr. 5. Records fair except for estimated daily discharges, which are poor. Transmountain diversion upstream from station to Charles H. Boustead tunnel by feeder conduit. Several small diversions upstream from station for irrigation of hay meadows upstream from and downstream from station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--16 years (water years 1951-1956, 1970-1979), 50.7 ft^3/s; 36,730 acre-ft/yr, prior to diversion through Charles H. Boustead Tunnel; 9 years (water years 1980-88), 47.8 ft^3/s; 34,630 acre-ft/yr, subsequent to diversions through Charles H. Boustead Tunnel.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,170 ft^3/s, June 8, 1985, gage height, 2.33 ft; from rating curve extended above 300 ft^3/s; maximum gage height, 4.30 ft, Nov. 30, 1984 (backwater from ice); minimum discharge not determined.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,040 ft^3/s at 2200 June 7, gage height, 2.18 ft; minimum daily, 4.1 ft^3/s, Dec. 12-14.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.3	9.4	7.9	5.5	7.0	8.0	6.0	71	170	59	35	13
2	8.3	10	9.0	5.5	7.0	8.0	6.0	49	225	56	28	12
3	8.0	9.1	9.0	5.7	7.0	8.0	6.0	41	482	52	25	9.9
4	8.0	8.3	9.0	5.8	6.0	7.0	7.0	38	716	52	23	10
5	8.0	7.3	9.0	5.8	6.0	7.0	7.5	50	770	53	22	9.4
6	7.6	9.8	7.6	6.2	6.0	7.0	9.2	71	786	53	20	9.0
7	7.2	9.4	7.2	6.2	7.0	7.0	13	46	776	51	21	6.9
8	6.9	9.4	7.2	6.5	7.0	7.0	15	42	767	49	21	6.5
9	6.5	7.3	6.5	6.5	7.0	7.0	14	35	560	41	18	6.7
10	6.5	8.3	6.5	6.5	7.0	7.0	15	37	180	39	16	7.2
11	6.5	9.0	5.5	6.9	7.0	6.0	14	54	145	42	14	17
12	5.8	8.2	4.1	6.5	7.0	6.0	18	104	132	41	13	23
13	6.3	9.4	4.1	5.8	7.0	6.0	23	163	96	39	13	34
14	7.9	9.0	4.1	6.2	7.0	6.0	27	206	72	37	12	25
15	8.3	9.4	4.4	6.9	7.0	7.0	31	262	70	35	11	16
16	7.6	9.0	4.4	7.2	7.0	7.0	36	367	63	34	13	14
17	6.5	8.0	4.5	7.2	6.0	6.0	37	417	61	34	19	14
18	5.8	8.0	5.0	7.2	5.0	6.0	30	577	60	30	18	12
19	6.2	9.0	5.0	6.9	5.0	6.0	27	471	61	28	15	10
20	5.0	11	5.0	5.5	5.0	7.0	28	195	62	25	13	9.4
21	6.1	11	4.7	5.5	6.0	7.0	33	126	67	25	15	11
22	6.9	9.5	4.7	6.0	6.0	7.0	33	107	60	23	30	12
23	7.2	7.6	4.7	6.0	6.0	8.0	28	97	57	22	22	9.9
24	7.9	7.2	5.0	6.0	7.0	8.0	26	108	56	20	18	9.4
25	9.0	6.9	5.0	6.0	7.0	8.0	25	148	58	19	15	8.2
26	9.4	7.6	5.0	6.0	8.0	8.0	24	195	55	20	14	7.6
27	8.5	6.9	5.2	7.0	8.0	9.0	26	252	56	26	15	8.1
28	7.6	6.5	5.2	8.0	8.0	9.0	27	340	66	22	15	8.0
29	9.0	7.4	5.2	8.0	8.0	8.0	32	511	92	25	13	7.4
30	8.7	6.9	5.2	8.0	---	7.0	47	499	65	39	12	5.8
31	9.0	---	5.5	8.0	---	6.0	---	197	---	73	13	---
TOTAL	230.5	255.8	180.4	201.0	194.0	221.0	670.7	5876	6886	1164	552	352.4
MEAN	7.44	8.53	5.82	6.48	6.69	7.13	22.4	190	230	37.5	17.8	11.7
MAX	9.4	11	9.0	8.0	8.0	9.0	47	577	786	73	35	34
MIN	5.0	6.5	4.1	5.5	5.0	6.0	6.0	35	55	19	11	5.8
AC-FT	457	507	358	399	385	438	1330	11660	13660	2310	1090	699

CAL YR 1987 TOTAL 18724.9 MEAN 51.3 MAX 737 MIN 4.1 AC-FT 37140
WTR YR 1988 TOTAL 16783.8 MEAN 45.9 MAX 786 MIN 4.1 AC-FT 33290

09074800 CASTLE CREEK ABOVE ASPEN, CO

LOCATION.--Lat 39°05'15", long 106°48'42", Pitkin County, Hydrologic Unit 14010004, on right bank 0.4 mi downstream from Forest Service bridge, 0.4 mi upstream from Sandy Creek, and 7 mi south of Aspen.

DRAINAGE AREA.--32.2 mi.

PERIOD OF RECORD.--September 1969 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 9,100 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 18-20, and Dec. 14 to Apr. 2. Records good except for estimated daily discharges, which are poor. No diversion upstream from station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--19 years, 44.1 ft^3/s; 31,950 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 559 ft^3/s, June 30, 1984, gage height, 3.64 ft; maximum gage height, 3.88 ft, June 23, 1970; minimum daily discharge, 6.0 ft^3/s, Jan. 7, 1982.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 200 ft^3/s, and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
June 6	2200	*285	*2.66				

Minimum daily discharge, 6.5 ft^3/s, Feb. 18.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	20	13	11	9.5	8.5	9.5	21	68	97	45	21
2	21	20	13	9.5	9.5	8.5	10	20	75	87	40	20
3	21	19	13	10	9.5	8.0	11	19	116	80	37	19
4	21	19	13	11	8.0	7.5	11	20	185	75	35	18
5	21	18	12	11	8.0	7.0	11	20	206	75	34	18
6	21	20	12	12	9.0	7.5	11	21	215	76	34	17
7	21	19	12	12	9.5	8.0	11	20	203	70	33	17
8	21	18	12	12	10	7.0	11	20	189	66	32	16
9	20	17	13	11	9.0	7.5	12	20	191	58	31	16
10	20	16	12	11	9.5	8.0	12	20	195	53	30	17
11	20	17	12	11	8.5	7.5	12	22	176	57	28	20
12	20	16	12	10	8.5	7.0	12	25	150	51	28	28
13	20	15	12	8.0	8.5	7.5	13	32	135	49	27	27
14	22	15	10	10	8.5	7.0	12	55	105	54	26	25
15	21	15	9.5	10	8.5	8.0	12	73	122	48	25	24
16	20	14	10	11	9.0	7.5	12	88	130	45	28	25
17	20	14	12	10	7.5	7.0	12	100	128	44	29	24
18	20	14	12	10	6.5	7.0	13	105	127	42	27	24
19	20	13	13	9.0	7.0	7.5	13	87	146	41	26	23
20	19	13	11	7.0	7.5	8.0	14	65	152	38	25	22
21	18	13	10	9.0	7.0	8.5	16	50	158	37	28	25
22	18	13	11	8.5	7.5	9.0	15	42	137	36	31	24
23	18	13	12	9.0	7.5	9.0	15	40	136	35	28	23
24	19	13	11	9.0	7.5	9.0	15	47	140	35	27	23
25	20	13	10	8.0	7.5	8.5	15	67	125	34	26	22
26	19	13	9.5	9.0	7.5	9.0	15	85	135	34	25	22
27	19	13	10	9.0	8.0	11	15	102	116	35	25	21
28	18	13	11	9.5	8.5	12	16	107	134	35	25	22
29	18	12	10	9.5	8.5	10	17	132	125	50	23	21
30	20	13	11	10	---	10	19	116	117	49	22	20
31	20	---	11	9.5	---	9.5	---	81	---	50	22	---
TOTAL	618	461	355.0	306.5	241.0	257.0	392.5	1722	4337	1636	902	644
MEAN	19.9	15.4	11.5	9.89	8.31	8.29	13.1	55.5	145	52.8	29.1	21.5
MAX	22	20	13	12	10	12	19	132	215	97	45	28
MIN	18	12	9.5	7.0	6.5	7.0	9.5	19	68	34	22	16
AC-FT	1230	914	704	608	478	510	779	3420	8600	3250	1790	1280

CAL YR 1987 TOTAL 17275.0 MEAN 47.3 MAX 306 MIN 9.5 AC-FT 34260
WTR YR 1988 TOTAL 11872.0 MEAN 32.4 MAX 215 MIN 6.5 AC-FT 2355

09075700 MAROON CREEK ABOVE ASPEN, CO

LOCATION.--Lat 39°07'25", long 106°54'17", Pitkin County, Hydrologic Unit 14010004, on left bank 0.3 mi upstream from Silver Queen Forest Service campground, 1.2 mi downstream from confluence of East and West Maroon Creeks, and 7.2 mi southwest of Aspen.

DRAINAGE AREA.--35.4 mi².

PERIOD OF RECORD.--September 1969 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 8,720 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Dec. 14 to Apr. 14. Records good except for estimated daily discharges, which are poor. No diversion upstream from station. Natural regulation by Maroon Lake. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--19 years, 68.4 ft³/s; 49,560 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 836 ft³/s, June 22, 1980, gage height, 3.39 ft, from rating curve extended above 350 ft³/s, but may have been higher during a period of indefinite stage-discharge relationship in June, 1984; maximum gage height, 4.53 ft, Feb. 3, 1972 (backwater from ice); minimum daily discharge, 9.0 ft³/s, Mar. 29, 1975.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 250 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
June 11	0200	*275	*2.83				

Minimum daily, 14 ft³/s, Apr. 10.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	39	32	24	23	22	31	18	19	118	180	67	48
2	39	32	24	19	22	31	19	19	125	166	65	47
3	38	32	23	21	22	30	20	19	153	158	63	47
4	38	32	23	24	19	29	21	20	199	149	62	45
5	38	31	23	24	20	27	22	21	224	147	62	45
6	37	32	23	26	22	28	22	21	241	143	63	44
7	37	31	23	26	23	30	23	22	246	129	63	44
8	36	31	23	25	25	27	24	22	252	122	62	44
9	35	30	23	25	23	29	19	21	256	112	60	43
10	35	29	22	25	25	30	14	21	247	104	59	44
11	35	29	22	25	24	29	15	21	252	101	57	45
12	35	29	22	23	24	26	15	22	236	97	56	49
13	36	29	22	19	24	27	15	24	211	92	54	48
14	36	29	21	23	24	25	16	28	191	83	53	47
15	35	29	19	23	24	29	17	40	189	86	54	47
16	35	28	20	25	26	27	17	57	188	85	54	46
17	35	28	26	24	24	26	18	68	187	83	53	45
18	35	28	26	25	23	25	18	75	186	80	53	44
19	34	27	27	23	26	26	18	71	194	79	51	43
20	34	27	25	17	27	27	18	68	192	76	50	43
21	34	26	22	21	26	28	19	74	200	73	51	42
22	34	26	25	20	28	29	18	80	201	71	51	42
23	33	26	26	21	28	29	18	82	201	71	52	42
24	33	26	25	21	28	30	18	81	210	69	51	43
25	34	25	22	18	27	29	18	91	204	68	50	42
26	33	25	22	21	28	30	17	98	197	67	50	42
27	33	25	24	21	30	32	17	111	191	66	51	41
28	32	25	24	22	31	34	18	111	193	66	50	41
29	32	25	22	22	31	36	17	137	194	70	50	40
30	33	24	24	23	---	26	18	143	192	77	49	40
31	33	---	24	23	---	22	---	117	---	71	49	---
TOTAL	1086	848	721	699	726	884	547	1804	6070	3046	1715	1323
MEAN	35.0	28.3	23.3	22.5	25.0	28.5	18.2	58.2	202	98.3	55.3	44.1
MAX	39	32	27	26	31	36	24	143	256	180	67	49
MIN	32	24	19	17	19	22	14	19	118	66	49	40
AC-FT	2150	1680	1430	1390	1440	1750	1080	3580	12040	6040	3400	2620

CAL YR 1987 TOTAL 20702 MEAN 56.7 MAX 217 MIN 13 AC-FT 41060
WTR YR 1988 TOTAL 19469 MEAN 53.2 MAX 256 MIN 14 AC-FT 38620

09076520 OWL CREEK NEAR ASPEN, CO

LOCATION.--Lat 39°13'25", long 106°52'45", in NE¼SE¼ sec.33, T.9 S., R.85 W., Pitkin County, Hydrologic Unit 14010004, on left bank 1.2 mi upstream from mouth and 3.8 mi northwest of Aspen.

DRAINAGE AREA.--6.60 mi².

PERIOD OF RECORD.--October 1974 to current year.

GAGE.--Water-stage recorder with V-notch concrete control. Elevation of gage is 7,870 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 1-7, Nov. 18-20, Dec. 8 to Jan. 12, Mar. 27-28, 31, Apr. 1, and Apr. 3-5. Records good except for estimated daily discharges, which are poor. Several small diversions upstream from station for irrigation of hay meadows. Water imported upstream from station, at times, from West Willow Creek through Willow and Owl ditches. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--14 years, 3.10 ft³/s; 2,250 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 90 ft³/s, May 21, 1984, gage height, 2.39 ft; no flow, Feb. 9 to Mar. 6, Sept. 10, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 24 ft³/s at 1945 May 18, gage height, 1.64 ft; maximum gage height, 1.75 ft at 2100 Apr. 4, (backwater from ice); minimum daily discharge, 0.07 ft³/s, Aug. 27.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.18	.21	.19	.31	.38	.23	1.8	11	3.3	2.1	.27	.12
2	.17	.22	.18	.26	.33	.27	1.8	12	2.4	2.1	.33	.12
3	.17	.21	.24	.30	.35	.30	1.9	11	2.2	2.0	.25	.09
4	.16	.19	.30	.40	.35	.32	2.0	9.0	2.7	1.9	.25	.09
5	.16	.20	.32	.43	.34	.30	2.1	9.9	3.3	1.9	.25	.09
6	.15	.22	.32	.46	.32	.32	2.1	12	2.6	1.8	.21	.09
7	.14	.27	.32	.46	.27	.35	4.0	11	2.4	1.5	.21	.08
8	.11	.30	.29	.46	.27	.35	4.5	10	2.5	1.3	.19	.09
9	.09	.22	.29	.45	.26	.35	3.9	10	2.1	1.2	.21	.09
10	.09	.21	.30	.44	.25	.35	3.8	10	2.5	1.2	.21	.09
11	.09	.21	.30	.45	.25	.35	4.1	11	1.6	1.9	.18	.14
12	.09	.21	.28	.42	.25	.32	4.8	13	2.9	1.2	.18	.37
13	.13	.22	.22	.39	.23	.32	5.2	16	3.4	.89	.17	.35
14	.22	.25	.20	.33	.22	.30	5.4	20	2.9	.82	.16	.25
15	.35	.22	.17	.35	.22	.31	5.4	20	2.5	.75	.14	.21
16	.32	.26	.19	.38	.22	.32	5.4	20	2.2	.75	.14	.21
17	.27	.22	.31	.39	.20	.32	5.7	20	2.7	.75	.14	.19
18	.27	.17	.31	.43	.19	.32	5.7	22	2.6	.75	.14	.19
19	.27	.18	.32	.40	.19	.32	5.9	22	2.0	.81	.14	.19
20	.25	.22	.30	.43	.19	.37	6.1	19	2.2	.81	.12	.21
21	.25	.26	.24	.42	.19	.38	7.0	15	1.9	.75	.14	.22
22	.25	.25	.28	.39	.18	.38	7.0	11	2.0	.55	.17	.22
23	.25	.19	.31	.38	.18	.48	6.8	10	1.9	.55	.18	.21
24	.25	.27	.29	.38	.18	1.1	5.9	7.3	2.1	.41	.18	.21
25	.40	.27	.23	.36	.19	1.5	5.4	3.2	2.4	.35	.18	.19
26	.43	.27	.22	.35	.18	1.7	5.0	2.0	2.4	.30	.10	.19
27	.39	.28	.26	.35	.18	2.3	5.2	2.2	2.6	.32	.07	.19
28	.38	.25	.27	.35	.19	3.0	6.6	2.6	2.4	.35	.09	.19
29	.35	.25	.25	.36	.21	2.7	7.0	6.0	3.1	.30	.09	.19
30	.74	.22	.29	.35	---	2.1	9.3	7.8	2.9	.30	.10	.19
31	.26	---	.32	.38	---	1.9	---	6.2	---	.32	.12	---
TOTAL	7.63	6.92	8.31	12.00	6.95	23.93	146.8	362.2	74.7	30.93	5.28	5.26
MEAN	.25	.23	.27	.39	.24	.77	4.89	11.7	2.49	1.00	.17	.18
MAX	.74	.30	.32	.46	.38	3.0	9.3	22	3.4	2.1	.30	.37
MIN	.09	.17	.17	.26	.18	.23	1.8	2.0	1.6	.30	.07	.08
AC-FT	15	14	16	24	14	47	291	718	148	61	10	10

CAL YR 1987 TOTAL 881.48 MEAN 2.42 MAX 28 MIN .09 AC-FT 1750
WTR YR 1988 TOTAL 690.91 MEAN 1.89 MAX 22 MIN .07 AC-FT 1370

09078600 FRYINGPAN RIVER NEAR THOMASVILLE, CO

LOCATION.--Lat 39°20'41", long 106°40'23", in NW¼NW¼ sec.21, T.8 S., R.83 W., Pitkin County, Hydrologic Unit 14010004, on right bank 400 ft upstream from private bridge, 400 ft downstream from North Fork, 1.6 mi southeast of Thomasville, and 1.7 mi northwest of Norrie.

DRAINAGE AREA.--134 mi².

PERIOD OF RECORD.--October 1975 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 8,210 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 18, and Dec. 19 to Apr. 11. Records good except for estimated daily discharges, which are poor. Transmountain diversions upstream from station to Arkansas River basin through Busk-Ivanhoe tunnel since June 1925 and Charles H. Boustead tunnel since May 16, 1972.

COOPERATION.--Records collected and computed by Colorado Division of Water Resources and reviewed by Geological Survey.

AVERAGE DISCHARGE.--13 years, 98.8 ft³/s; 71,580 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,550 ft³/s, June 8, 1987, gage height, 4.50 ft; minimum daily, 10 ft³/s, Nov. 28, 1976, Jan. 2, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,190 ft³/s at 2330 June 6, gage height, 4.08 ft; minimum daily, 18 ft³/s, Jan. 20, 21.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	34	23	20	23	24	39	177	411	144	114	35
2	30	38	26	19	22	25	42	130	406	130	88	35
3	29	34	29	19	21	25	48	111	655	133	77	32
4	29	31	27	20	21	24	54	116	888	122	71	29
5	29	28	27	21	21	23	60	141	957	120	64	29
6	29	35	26	23	21	23	60	175	930	120	61	28
7	29	35	25	22	21	23	64	137	975	113	63	28
8	28	34	25	22	22	22	64	122	930	125	61	26
9	28	24	25	22	21	23	62	109	930	125	54	26
10	28	29	25	23	23	25	60	117	966	125	50	27
11	26	33	25	23	23	25	72	140	870	144	48	45
12	27	24	24	22	21	24	81	235	813	128	48	53
13	28	30	23	20	21	24	106	371	690	125	47	58
14	35	30	23	20	22	24	123	508	536	130	43	60
15	37	27	21	21	22	24	128	585	557	120	41	46
16	35	23	21	23	22	26	123	662	557	115	44	42
17	29	23	23	21	21	26	136	705	529	106	47	38
18	29	19	24	21	21	25	111	773	329	99	45	37
19	29	25	26	20	21	27	114	750	318	91	41	36
20	26	29	24	18	22	30	117	508	303	87	38	35
21	26	29	23	18	22	35	143	360	248	81	43	36
22	26	29	23	19	22	40	116	289	215	76	69	37
23	27	27	24	21	22	40	101	257	208	72	49	35
24	29	26	24	21	22	37	90	303	212	69	43	34
25	34	27	22	19	23	41	83	423	189	66	39	33
26	32	27	21	19	23	41	78	515	186	67	38	31
27	29	26	22	20	23	41	81	606	200	75	38	30
28	29	26	22	21	24	39	85	641	219	69	37	30
29	31	26	22	22	24	35	94	750	313	82	36	28
30	33	25	23	23	---	37	131	720	166	86	34	30
31	33	---	22	22	---	40	---	487	---	142	34	---
TOTAL	921	853	740	645	637	918	2666	11923	15706	3237	1605	1069
MEAN	29.7	28.4	23.9	20.8	22.0	29.6	88.9	385	524	106	51.8	35.6
MAX	37	38	29	23	24	41	143	773	975	144	114	60
MIN	26	19	21	18	21	22	39	109	166	66	34	26
AC-FT	1830	1690	1470	1280	1260	1820	5290	23650	31150	6520	3180	2120

CAL YR 1987 TOTAL 47436 MEAN 130 MAX 1200 MIN 15 AC-FT 94090
WTR YR 1988 TOTAL 40970 MEAN 112 MAX 975 MIN 18 AC-FT 81260

09080190 RUEDI RESERVOIR NEAR BASALT, CO

LOCATION.--Lat 39°21'50", long 106°49'05", in NW¼ sec.18, T.8 S., R.84 W., Pitkin County, Hydrologic Unit 14010004, in gatehouse of Ruedi Dam just upstream from Rocky Fork Creek and 13 mi east of Basalt.

DRAINAGE AREA.--223 mi².

PERIOD OF RECORD.--May 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation); gage readings have been reduced to elevations above National Geodetic Vertical Datum of 1929.

REMARKS.--Reservoir is formed by an earthfill dam. Storage began in May 1968; dam completed July 16, 1968. Capacity, 102,300 acre-ft, 1969 survey, between elevations 7,540.00 ft, sill of auxiliary outlet, and 7,766.00 ft, crest of spillway. Dead storage below elevation 7,540.00 ft, 61 acre-ft. Figures given are total contents.

COOPERATION.--Records provided by U.S. Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 103,900 acre-ft, July 15, 1973, elevation, 7,767.56 ft; minimum after first filling, 48,000 acre-ft, May 13, 1971, elevation, 7,698.03 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 98,300 acre-ft, July 16, 17, elevation, 7,761.88 ft; minimum contents, 54,900 acre-ft, May 11, elevation, 7,708.60 ft.

MONTHEND ELEVATION IN FEET NGVD AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

Date	Elevation	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	7,759.17	95,700	-
Oct. 31	7,754.02	90,900	-4,800
Nov. 30	7,748.86	86,200	-4,700
Dec. 31	7,742.65	80,800	-5,400
CAL YR 1987			-3,700
Jan. 31	7,736.06	75,200	-5,600
Feb. 29	7,726.68	67,800	-7,400
Mar. 31	7,714.02	58,600	-9,200
Apr. 30	7,708.74	55,000	-3,600
May 31	7,731.82	71,800	+16,800
June 30	7,761.44	97,900	+26,100
July 31	7,761.32	97,800	-100
Aug. 31	7,757.86	94,500	-3,300
Sept. 30	7,750.60	87,800	-6,700
WTR YR 1988			-7,900

09080400 FRYINGPAN RIVER NEAR RUEDI, CO

LOCATION.--Lat 39°21'56", long 106°49'30", in SE¼SE¼ sec.12, T.8 S., R.85 W., Eagle County, Hydrologic Unit 14010004, on right bank 0.4 mi downstream from Rocky Fork Creek and Ruedi Dam, 1.5 mi west of former site of Ruedi, and 12.5 mi east of Basalt.

DRAINAGE AREA.--238 mi².

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 7,473.25 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation). Prior to Nov. 7, 1970, at site 2.0 mi downstream at different datum.

REMARKS.--No estimated daily discharges. Records good. Diversions for irrigation of hay meadows upstream from station. Transmountain diversions upstream from station to Arkansas River basin through Busk-Ivanhoe tunnel since June 1925 and Charles H. Boustead tunnel since May 16, 1972 (see elsewhere in this report). Flow regulated by Ruedi Reservoir (station 09080190) since May 18, 1968. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--21 years (water years 1968-88), 189 ft³/s; 136,900 acre-ft/yr, subsequent to completion of Ruedi Reservoir.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,690 ft³/s, June 18, 1965, gage height, 5.16 ft, site and datum then in use; minimum daily, 16 ft³/s, Feb. 2, 1968 (result of storage in Ruedi Reservoir); minimum daily prior to construction of Ruedi Reservoir, 28 ft³/s, Mar. 4, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 319 ft³/s at 0930 June 13, gage height, 2.24 ft; minimum daily, 117 ft³/s, Feb. 12.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	134	146	142	144	140	180	190	205	228	195	140	146
2	134	146	142	142	140	181	190	205	228	195	140	146
3	134	146	142	144	140	181	190	205	228	195	140	146
4	136	146	142	144	139	182	187	205	225	194	140	148
5	136	146	142	144	138	181	185	205	225	192	140	148
6	136	146	142	144	138	182	185	205	226	174	140	148
7	136	146	142	144	138	182	186	205	228	173	140	148
8	136	146	142	144	138	183	186	205	229	172	140	156
9	137	146	142	144	138	181	202	205	231	166	140	176
10	138	146	142	144	138	180	203	205	250	165	140	177
11	138	146	142	144	125	182	201	205	273	165	141	177
12	138	146	142	144	117	181	193	205	273	165	142	178
13	138	146	142	144	124	181	[illegible]	[illegible]	303	165	142	177
14	138	146	142	143	127	[illegible]	190	213	319	165	142	177
15	140	146	142	142	127	181	[illegible]	214	319	140	142	183
16	140	146	143	142	[illegible]	[illegible]	[illegible]	213	319	134	140	185
17	140	146	144	142	[illegible]	182	[illegible]	[illegible]	309	136	143	185
18	140	144	144	142	176	[illegible]	[illegible]	[illegible]	[illegible]	133	144	185
19	140	144	144	141	[illegible]	[illegible]	[illegible]	[illegible]	276	138	144	185
20	143	142	144	142	[illegible]	[illegible]	[illegible]	[illegible]	259	138	144	185
21	144	142	144	141	181	[illegible]	[illegible]	219	204	138	144	183
22	144	142	144	140	181	[illegible]	[illegible]	[illegible]	202	138	144	180
23	144	142	144	140	[illegible]	184	[illegible]	[illegible]	202	138	146	180
24	144	142	144	140	180	189	202	219	202	138	146	180
25	146	142	144	140	180	190	202	219	202	138	146	180
26	146	142	144	140	180	190	202	219	200	138	146	180
27	146	142	144	140	180	190	202	223	200	138	146	180
28	145	142	144	139	180	190	204	225	199	138	145	177
29	144	142	144	138	150	190	205	225	197	138	146	177
30	145	142	144	138	---	190	205	228	196	138	146	170
31	146	---	144	140	---	190	---	228	---	138	146	---
TOTAL	4346	4330	4433	4401	4662	5702	5921	6628	7230	4825	4427	5143
MEAN	140	144	143	142	161	184	197	214	241	156	143	171
MAX	146	146	144	144	181	190	205	228	319	195	146	185
MIN	134	142	142	138	117	180	185	205	196	136	140	146
AC-FT	8620	8590	8790	8730	9250	11310	11740	13150	14340	9570	8780	10200

CAL YR 1987 TOTAL 70597 MEAN 193 MAX 403 MIN 120 AC-FT 140000
WTR YR 1988 TOTAL 62050 MEAN 170 MAX 319 MIN 117 AC-FT 123100

09081600 CRYSTAL RIVER ABOVE AVALANCHE CREEK, NEAR REDSTONE, CO

LOCATION.--Lat 39°13'56", long 107°13'36", in SE¼SW¼ sec.33, T.9 S., R.88 W., Pitkin County, Hydrologic Unit 14010004, on right bank 1.2 mi upstream from Avalanche Creek and 3.6 mi north of Redstone.

DRAINAGE AREA.--167 mi².

PERIOD OF RECORD.--October 1955 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,905 ft, from river-profile map.

REMARKS.--No estimated daily discharges. Records good. A few small diversions for irrigation upstream from station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--33 years, 302 ft³/s; 218,800 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,180 ft³/s, June 25, 1983, gage height, 6.12 ft; minimum daily, 22 ft³/s, Dec. 5, 1955, Feb. 15, 1964, Jan 2, Feb. 17, 18, 1978.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,000 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)
June 6	2400	*1,790	*4.33

Minimum daily, 33 ft³/s, Jan. 20.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	79	75	47	44	44	53	59	311	645	642	178	88
2	74	90	53	36	44	53	62	249	612	564	154	87
3	73	78	51	40	44	51	65	214	877	526	144	82
4	75	77	49	45	35	49	71	208	1230	471	139	80
5	73	71	52	47	37	46	74	234	1450	458	133	78
6	73	85	50	49	41	48	82	276	1540	443	132	75
7	68	84	50	49	43	50	110	236	1510	402	133	73
8	65	76	49	49	46	46	141	219	1410	356	127	70
9	65	68	50	48	41	48	121	208	1370	312	120	69
10	64	67	52	47	45	50	111	225	1430	296	115	76
11	63	68	51	48	43	47	122	283	1340	282	112	124
12	63	60	46	43	42	43	155	422	1230	269	108	212
13	71	63	40	34	43	45	196	594	1080	261	107	198
14	80	64	38	43	43	41	211	754	979	255	104	153
15	79	61	35	44	41	49	230	880	923	243	104	128
16	72	57	37	47	44	46	237	975	980	225	118	117
17	67	58	51	45	39	44	233	1070	990	220	116	115
18	66	46	49	46	37	42	194	1140	1000	206	106	116
19	64	51	51	43	41	44	181	981	1080	195	101	109
20	61	56	48	33	45	47	177	736	1150	184	93	102
21	59	58	42	42	44	53	207	563	1120	176	111	106
22	59	56	43	40	46	60	193	478	1070	169	143	111
23	59	55	51	42	47	62	183	463	973	163	120	104
24	62	52	48	42	46	63	169	564	1020	158	113	98
25	78	50	42	37	45	59	156	719	962	153	105	93
26	68	53	41	43	46	63	147	813	883	151	101	90
27	64	51	45	42	49	79	148	935	773	153	103	86
28	64	47	46	44	53	91	161	980	814	148	99	84
29	65	51	42	45	51	69	177	1120	933	145	95	81
30	73	48	47	46	---	70	233	1090	775	154	92	79
31	70	---	46	45	---	64	---	804	---	197	91	---
TOTAL	2116	1876	1447	1348	1265	1675	4606	18734	32053	8577	3619	3093
MEAN	68.3	62.5	46.7	43.5	43.6	54.0	154	604	1068	277	117	103
MAX	80	90	53	49	53	91	237	1140	1540	642	178	212
MIN	59	46	35	33	35	41	59	208	612	145	91	69
AC-FT	4200	3720	2870	2670	2510	3320	9140	37160	63580	17010	7180	6120

CAL YR 1987 TOTAL 98636 MEAN 270 MAX 1520 MIN 35 AC-FT 195600
WTR YR 1988 TOTAL 80399 MEAN 220 MAX 1540 MIN 33 AC-FT 159500

09085000 ROARING FORK RIVER AT GLENWOOD SPRINGS, CO

LOCATION.--Lat 39°32'37", long 107°19'44", in SW¼SE¼ sec.9, T.6 S., R.89 W., Garfield County, Hydrologic Unit 14010004, on left bank at Glenwood Springs, 2,100 ft, upstream from mouth.

DRAINAGE AREA.--1,451 mi².

PERIOD OF RECORD.--October 1905 to September 1909, September 1910 to current year. Monthly discharge only for some periods, published in WSP 1313. Prior to October 1960, published as Roaring Fork at Glenwood Springs.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 5,720.73 ft above National Geodetic Vertical Datum of 1929. Prior to Nov. 20, 1915, nonrecording gage on highway bridge 800 ft downstream, at different datum. Nov. 20, 1915, to Oct. 26, 1917, nonrecording gage at present site and datum.

REMARKS.--No estimated daily discharges. Records good. Diversions upstream from station for irrigation of about 35,000 acres. Transmountain diversions to Arkansas River basin through Busk-Ivanhoe tunnel since 1925, Twin Lakes tunnel since 1935, and Charles H. Boustead tunnel since 1972. Natural flow of stream affected by storage in Ruedi Reservoir on Fryingpan River (station 09080190) since May 1968.

AVERAGE DISCHARGE.--65 years (water years 1906-9, 1911-71), 1,368 ft³/s; 991,100 acre-ft/yr prior to diversion through Charles H. Boustead tunnel; 17 years (water years 1972-88), 1,275 ft³/s, 923,700 acre-ft/yr, subsequent to diversions through Charles H. Boustead tunnel.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19,000 ft³/s, July 1, 1957, gage height, 8.65 ft; maximum gage height, 8.7 ft, June 14, 1921, from floodmarks; minimum discharge, 145 ft³/s, Jan. 21, 1935, gage height, 0.65 ft; minimum daily discharge, 179 ft³/s, Jan. 21, 1935.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,690 ft³/s at 0430, June 7, gage height, 5.21 ft; minimum daily 390 ft³/s, Feb. 12.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	490	631	549	485	457	521	505	1140	1700	2030	767	468
2	499	657	583	475	446	527	529	981	1510	1820	713	467
3	499	653	584	476	456	528	538	851	1940	1710	650	468
4	502	629	569	471	414	518	547	799	2920	1600	610	465
5	509	624	575	536	408	484	557	793	3750	1560	592	459
6	510	657	579	560	420	498	549	877	4030	1520	568	465
7	518	701	563	506	424	528	599	793	4090	1410	590	458
8	529	671	574	501	449	488	692	727	3970	1290	566	441
9	549	640	537	505	429	495	661	663	3820	1200	541	454
10	560	624	568	500	443	529	620	616	3760	1140	524	468
11	559	638	564	504	432	502	635	633	3650	1140	512	498
12	558	648	533	496	390	469	676	781	3330	1070	515	681
13	567	640	496	455	452	483	782	1100	3050	1010	519	893
14	599	645	481	490	479	443	844	1490	2440	959	508	769
15	619	649	475	485	462	495	904	1770	2420	903	503	702
16	603	630	471	512	479	510	936	1990	2540	842	513	675
17	607	624	526	477	461	481	973	2270	2540	827	506	661
18	608	577	543	481	442	465	891	2660	2550	801	509	650
19	605	569	571	474	462	481	849	2460	2680	739	483	651
20	608	610	550	447	485	497	833	1890	2960	706	483	633
21	607	629	509	470	462	508	933	1460	2860	663	497	630
22	621	627	527	492	470	532	913	1250	2760	638	551	631
23	625	618	558	457	462	543	865	1130	2520	629	544	628
24	632	610	539	471	464	554	840	1180	2660	619	516	596
25	659	581	501	444	469	521	785	1430	2530	608	501	576
26	643	610	497	462	479	531	739	1600	2390	604	492	571
27	639	595	531	476	486	580	716	1880	2210	586	490	569
28	639	556	534	457	508	629	752	2080	2110	574	485	582
29	620	575	511	462	509	539	799	2540	2670	589	460	577
30	641	568	523	477	---	576	930	2740	2410	663	446	568
31	650	---	514	458	---	538	---	2050	---	773	455	---
TOTAL	18079	18686	16635	14963	13199	15993	22392	44624	84770	31223	16609	17354
MEAN	583	623	537	483	455	516	746	1439	2826	1007	536	578
MAX	659	701	584	560	509	629	973	2740	4090	2030	767	893
MIN	490	556	471	444	390	443	505	616	1510	574	446	441
AC-FT	35860	37060	33000	29680	26180	31720	44410	88510	168100	61930	32940	34420

CAL YR 1987 TOTAL 434078 MEAN 1189 MAX 5720 MIN 471 AC-FT 861000
WTR YR 1988 TOTAL 314527 MEAN 859 MAX 4090 MIN 390 AC-FT 623900

09085100 COLORADO RIVER BELOW GLENWOOD SPRINGS, CO

LOCATION.--Lat 39°33'18", long 107°20'13", in NW¼NW¼ sec.9, T.6 S., R.89W., Garfield County, Hydrologic Unit 14010005, on left bank 0.6 mi downstream from Roaring Fork River and 1.0 mi northwest of Post Office in Glenwood Springs.

DRAINAGE AREA.--6,013 mi².

PERIOD OF RECORD.--October 1966 to current year.

GAGE.--Water-stage recorder. Datum of gage is 5,700.75 ft above National Geodetic Vertical Datum of 1929 (Colorado State Highway Department benchmark).

REMARKS.--Estimated daily discharges: Sept. 7, 8, 26, 27. Records good. Natural flow of stream affected by transmountain diversions, storage reservoirs, power development, and diversions for irrigation of [illegible] acres.

AVERAGE DISCHARGE.--22 years, 3,580 ft³/s; 2,594,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 31,500 ft³/s, May 25, 1984, gage height, 17.49 ft; minimum daily, 870 ft³/s, Feb. 11, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 11,000 ft³/s at 0700 June 7, gage height, 7.50 ft; minimum daily, 1,130 ft³/s, Dec. 16.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1770	1770	1540	1430	1550	1720	1720	4080	6400	5630	[illegible]	[illegible]
2	1790	1960	1610	1310	1530	1750	1730	4170	5640	5350	[illegible]	[illegible]
3	1770	1970	1750	1190	1550	1760	1800	3730	6140	5060	[illegible]	[illegible]
4	1770	1940	1720	1200	1430	1750	1950	3440	7350	[illegible]	[illegible]	[illegible]
5	1810	1910	1740	1370	1340	1640	2250	3460	9970	4640	[illegible]	[illegible]
6	1760	1920	1720	1510	1330	1650	2320	3740	10100	[illegible]	[illegible]	[illegible]
7	1770	2050	1690	1640	1390	1760	2340	3760	10200	4300	[illegible]	[illegible]
8	1790	2000	1680	1580	1490	1600	2720	3550	9750	[illegible]	[illegible]	[illegible]
9	1830	1950	1600	1550	1510	1630	2580	3570	9420	3560	[illegible]	[illegible]
10	1890	1870	1640	1540	1550	1710	2590	[illegible]	9150	[illegible]	[illegible]	[illegible]
11	1860	1920	1690	1590	1510	1630	2470	3230	9030	[illegible]	[illegible]	[illegible]
12	1840	1910	1590	1570	1450	1560	2530	3410	8250	[illegible]	[illegible]	[illegible]
13	1960	1860	1330	1410	1500	1540	2940	4240	7640	2190	[illegible]	[illegible]
14	1910	1900	1290	1390	1530	1480	3250	[illegible]	6460	[illegible]	[illegible]	[illegible]
15	1910	1900	1160	1470	1630	1610	3530	6490	6130	[illegible]	[illegible]	[illegible]
16	1870	1890	1130	1600	1550	1590	3600	[illegible]	6410	[illegible]	[illegible]	[illegible]
17	1850	1850	1430	1570	1500	1590	3830	8350	6090	[illegible]	[illegible]	[illegible]
18	1850	1850	1490	1540	1400	1560	3920	5740	6010	[illegible]	[illegible]	[illegible]
19	1830	1630	1640	1510	1450	1540	3640	8910	6100	[illegible]	[illegible]	[illegible]
20	1830	1750	1580	1350	1540	1590	3710	5170	6600	[illegible]	[illegible]	1470
21	1720	1730	1420	1370	1640	1640	3830	7260	6280	[illegible]	[illegible]	1970
22	1730	1750	1390	1370	1650	1680	3920	6310	6500	[illegible]	[illegible]	1930
23	1690	1790	1540	1410	1590	1740	3610	[illegible]	6740	[illegible]	[illegible]	1940
24	1710	1790	1560	1480	1510	1780	3300	5170	6770	[illegible]	[illegible]	1820
25	1700	1700	1360	1290	1600	1750	3110	5420	6270	[illegible]	[illegible]	1810
26	1630	1730	1200	1360	1610	1670	2930	5920	5530	[illegible]	[illegible]	[illegible]
27	1710	1700	1360	1460	1630	1790	2900	6470	5430	[illegible]	[illegible]	1790
28	1680	1610	1480	1500	1690	2020	2890	7030	5220	[illegible]	[illegible]	[illegible]
29	1660	1580	1500	1510	1700	1950	2970	[illegible]	6060	[illegible]	[illegible]	[illegible]
30	1650	1590	1540	1550	---	1930	3300	8590	5970	2410	[illegible]	[illegible]
31	1750	---	1490	1550	---	1830	---	7420	---	2520	[illegible]	---
TOTAL	55190	54770	46860	45260	44340	52440	88500	173260	213650	98150	[illegible]	57700
MEAN	1780	1826	1512	1460	1529	1692	2950	5589	7122	3167	[illegible]	1923
MAX	1910	2050	1750	1640	1700	2020	3920	8910	10200	5630	[illegible]	2590
MIN	1630	1580	1130	1190	1330	1480	1720	3220	5220	2240	[illegible]	1630
AC-FT	109500	108600	92950	89770	87950	104000	175500	343700	423800	194700	[illegible]	114400

CAL YR 1987 TOTAL 1048260 MEAN 2872 MAX 10600 MIN 1130 AC-FT 2079000
WTR YR 1988 TOTAL 996390 MEAN 2722 MAX 10200 MIN 1130 AC-FT 1976000

09089500 WEST DIVIDE CREEK NEAR RAVEN, CO

LOCATION.--Lat 39°19'52", long 107°34'46", in NE¼SW¼ sec.29, T.8 S., R.91 W., Mesa County, Hydrologic Unit 14010005, on left bank 10 ft, downstream from private road bridge, 0.8 mi upstream from Brook Creek, 8 mi south of Raven, and 16 mi south of Silt.

DRAINAGE AREA.--64.6 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1955 to current year.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 7,050 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 16-17, and Dec. 3 to Mar. 31. Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by water imported from Thompson Creek (Roaring Fork basin), Muddy Creek (Muddy Creek basin), and Buzzard Creek (Plateau Creek basin). Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--33 years, 35.9 ft³/s; 26,010 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,410 ft³/s, May 14, 1984, gage height, 5.83 ft, from rating curve extended above 670 ft³/s; no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 160 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
[illegible]	[illegible]	*[illegible]	*4.[illegible]	No other peak greater than base discharge.			

No flow, Sept. 6-10.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	[illegible]	3.4	[illegible]	2.6	2.4	2.9	7.6	106	80	25	1.4	.13
2	[illegible]	4.6	2.7	2.4	2.4	2.8	8.7	80	75	21	2.3	.11
3	1.5	4.1	2.4	2.5	2.5	2.7	12	71	92	19	1.5	.09
4	1.5	3.5	2.4	2.7	2.1	2.5	15	77	124	17	.97	.06
5	1.8	3.8	2.3	2.5	2.1	2.5	14	75	141	19	.63	.01
6	1.5	4.[illegible]	2.7	3.1	[illegible]	2.3	13	89	130	19	.54	.00
7	1.6	3.6	2.9	3.1	2.4	2.6	13	75	141	20	1.1	.00
8	1.5	[illegible]	2.7	3.1	2.4	2.6	3[illegible]	71	134	13	1.3	.00
9	1.6	[illegible]	3.3	3.0	2.3	2.7	28	67	114	11	.8[illegible]	.00
10	1.5	[illegible]	3.1	2.9	2.4	2.3	32	81	102	9.4	.41	.00
11	3.6	3.5	3.3	2.9	2.4	2.5	24	93	96	13	.20	.12
12	[illegible]	[illegible]	2.8	2.7	2.4	2.8	34	133	86	9.4	.17	7.6
13	3.4	3.3	2.6	2.9	2.4	3.0	44	165	82	8.1	2.7	14
14	3.3	3.4	2.4	3.3	2.4	2.9	48	188	72	7.2	1.1	7.7
15	3.4	3.1	2.5	2.7	2.4	3.4	60	194	64	6.4	.47	3.8
16	3.3	3.3	2.6	2.7	2.4	3.2	50	196	63	5.6	.56	2.6
17	2.7	2.9	2.5	2.6	2.2	3.1	49	200	60	5.3	1.4	2.1
18	2.3	3.2	2.9	2.6	2.2	3.1	39	214	57	5.2	.90	2.0
19	[illegible]	3.7	3.0	2.5	2.3	3.3	37	190	55	3.6	.4[illegible]	1.8
20	1.9	3.6	2.9	[illegible]	2.4	3.5	30	142	55	2.8	.20	1.5
21	1.8	3.8	2.7	2.4	2.4	4.0	47	109	50	2.2	.64	1.2
22	1.8	3.9	2.7	2.3	2.5	4.4	43	96	45	1.9	1.8	1.0
23	1.9	3.5	3.1	2.4	2.5	4.4	41	94	43	1.7	1.5	1.1
24	2.2	3.6	2.9	2.4	2.5	4.4	38	99	37	1.3	.71	.96
25	3.8	3.3	2.7	2.2	2.5	4.5	39	104	34	.95	.30	.90
26	4.2	3.4	2.6	2.4	2.6	5.2	39	103	31	.94	.17	.83
27	3.0	3.2	2.6	2.4	2.7	8.0	43	109	30	1.3	.29	.76
28	2.9	2.8	2.7	2.5	2.7	8.4	50	111	30	1.4	.43	.76
29	[illegible]	2.9	2.7	2.6	2.9	7.8	62	107	45	1.3	.27	.78
30	3.2	2.6	2.9	2.6	---	7.6	90	105	33	1.2	.15	.77
31	4.1	---	2.8	2.5	---	7.2	---	90	---	.90	.13	---
TOTAL	71.[illegible]	104.5	86.0	81.8	69.9	124.0	1099.3	3640	2209	255.09	25.47	52.68
MEAN	2.[illegible]	3.49	2.77	2.64	2.41	4.00	36.6	117	73.6	8.23	.82	1.76
MAX	4.2	5.4	3.1	3.1	2.9	8.4	90	214	141	25	2.7	14
MIN	1.5	2.6	2.3	2.1	2.1	2.5	7.6	67	30	.90	.13	.00
AC-FT	141	207	171	162	139	246	2180	7220	4380	506	51	104

CAL YR 1987 TOTAL 12791.2 MEAN 35.0 MAX 296 MIN 1.5 AC-FT 25370
WTR YR 1988 TOTAL 7818.94 MEAN 21.4 MAX 214 MIN .00 AC-FT 15510

DIVIDE CREEK BASIN

09089500 WEST DIVIDE CREEK NEAR RAVEN, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--May 1986 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
MAY										
05...	1115	69	258	8.2	5.0	10.1	120	0	38	5.7
20...	1250	153	192	8.0	3.5	10.2	92	0	30	4.2
JUL										
15...	1120	6.7	299	8.4	16.5	7.3	130	0	39	7.5
SEP										
16...	1130	2.4	324	8.0	7.0	9.3	140	0	41	8.3

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
MAY									
05...	11	0.5	1.1	125	13	2.5	0.10	9.5	156
20...	6.9	0.3	0.80	95	7.9	1.1	0.20	9.5	118
JUL									
15...	15	0.6	1.7	146	14	4.1	0.20	8.4	176
SEP									
16...	17	0.7	1.3	143	16	4.3	0.20	13	185

DATE	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)
MAY									
05...	0.21	29.0	0.01	--	<0.10	--	0.01	--	<0.20
20...	0.16	48.6	0.01	<0.01	<0.10	<0.10	0.02	0.02	<0.20
JUL									
15...	0.24	3.20	<0.01	--	<0.10	--	<0.01	--	0.70
SEP									
16...	0.25	1.20	<0.01	--	<0.10	--	<0.01	--	<0.20

DATE	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHOROUS TOTAL (MG/L AS P)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	PHOS-PHOROUS ORTHO, DIS-SOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	BORON, DIS-SOLVED (UG/L AS B)	IRON, DIS-SOLVED (UG/L AS FE)
MAY									
05...	--	0.04	--	0.03	--	6.5	[illegible]	<10	[illegible]
20...	<0.20	0.05	0.02	0.02	0.01	7.6	5.0	<10	[illegible]
JUL									
15...	--	0.03	--	<0.01	--	3.9	3.3	10	5
SEP									
16...	--	0.02	--	<0.01	--	6.0	4.5	10	10

09089500 WEST DIVIDE CREEK NEAR RAVEN, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)
MAY									
[illegible]...	1250	7000	100	<10	6	8	5	6000	8

DATE	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	STRONTIUM, TOTAL RECOVERABLE (UG/L AS SR)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)
MAY								
2[illegible]...	260	<0.10	3	11	<1	1	270	30

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT					
[illegible]...	11[illegible]	[illegible]	17	0.08	--
MAY					
[illegible]...	[illegible]	[illegible]	29[illegible]	[illegible]	77
[illegible]...	12[illegible]	15[illegible]	41[illegible]	17[illegible]	73
JUN					
[illegible]...	[illegible]	117	[illegible]	16[illegible]	[illegible]
[illegible]...	[illegible]	[illegible]	15[illegible]	[illegible]	77
JUL					
[illegible]...	[illegible]	[illegible].7	12	[illegible]	[illegible]
AUG					
[illegible]...	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]...	1420	[illegible]	[illegible]	[illegible]	--
SEP					
[illegible]...	[illegible]	[illegible]	[illegible]	0.14	[illegible]
[illegible]...	[illegible]	[illegible]	29	0.12	76

09093700 COLORADO RIVER NEAR DE BEQUE, CO

LOCATION.--Lat 39°21'45", long 108°09'07", in NE¼SW¼ sec.7, T.8 S., R.96 W., Mesa County, Hydrologic Unit 14010006, on left bank 3.0 mi downstream from Alkali Creek and 3.8 mi northeast of De Beque.

DRAINAGE AREA.--7,370 mi².

PERIOD OF RECORD.--Streamflow records, October 1966 to current year. Water-quality data available, August 1973 to September 1982. Sediment data available, October 1974 to September 1976.

GAGE.--Water-stage recorder. Elevation of gage is 4,940 ft from National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Jan. 2 to Feb. 10, and May 7-9. Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by transmountain diversions, storage reservoirs, power development, and diversions for irrigation of about 158,000 acres. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--22 years, 3,945 ft³/s; 2,858,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 38,200 ft³/s, May 26, 1984, gage height, 14.83 ft; minimum daily, 914 ft³/s, Dec. 22, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 11,500 ft³/s at 1600 June 7, gage height, 8.64 ft, minimum daily, 1,270 ft³/s, Dec. 16.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1860	1880	1650	1640	1580	1820	1820	3850	7170	5750	2420	1880
2	1860	1930	1660	1600	1600	1820	1770	4470	6360	5430	2380	1830
3	1870	2030	1720	1500	1500	1820	1780	4230	6260	5220	2220	1780
4	1860	1970	1790	1460	1460	1810	1860	3730	7480	5020	2070	1770
5	1870	1970	1790	1400	1400	1760	2050	3560	9550	4820	2020	1720
6	1900	2000	1780	1380	1400	1680	2300	3740	10800	4570	1990	1710
7	1880	2000	1760	1400	1460	1740	2280	4010	10900	4210	2040	1730
8	1870	2060	1760	1500	1480	1740	2520	3850	10500	3870	2100	1700
9	1900	2020	1720	1560	1500	1650	2860	3620	9930	3600	2060	1670
10	1940	1950	1680	1600	1550	1690	2760	3380	9660	3420	1980	1770
11	1980	1930	1740	1600	1620	1710	2520	3250	9420	3320	1930	1860
12	1930	1960	1720	1600	1580	1650	2490	3410	8840	3200	1960	2400
13	1970	1930	1580	1560	1540	1590	2710	4120	8060	3040	1970	2750
14	2010	1930	1450	1500	1600	1570	3190	5470	7140	2800	1980	2500
15	2030	1960	1360	1400	1600	1540	3440	6520	6490	2590	1980	2330
16	1980	1940	1270	1360	1600	1690	3660	7390	6420	2410	2000	2160
17	1940	1920	1420	1400	1610	1590	3820	8280	6340	2340	2060	2080
18	1940	1880	1590	1480	1550	1620	4050	9230	6300	2300	2030	2020
19	1940	1800	1630	1500	1570	1640	3810	9770	6220	2160	1990	1960
20	1920	1910	1730	1460	1530	1650	3760	9290	6580	2080	1950	1980
21	1860	1820	1600	1500	1640	1680	3900	8050	6600	2050	1970	2000
22	1820	1820	1520	1400	1720	1730	4210	6990	6560	2060	2100	1960
23	1830	1840	1570	1360	1670	1740	3970	6100	6310	2060	2060	1920
24	1810	1830	1680	1460	1630	1800	3630	5860	6550	2050	2020	1910
25	1840	1810	1570	1520	1600	1820	3310	6040	6430	2050	1960	1840
26	1790	1770	1380	1480	1680	1740	3150	6370	6070	2040	1910	1820
27	1750	1770	1380	1500	1680	1800	3000	6800	5670	2030	1910	1810
28	1780	1750	1500	1580	1730	1910	2950	7370	5370	2030	1910	1800
29	1770	1630	1620	1600	1770	2060	2950	8170	5810	1980	1920	1800
30	1790	1720	1630	1580	---	1930	3140	8980	6050	2100	1900	1790
31	1790	---	1640	1560	---	1950	---	8480	---	2210	1870	---
TOTAL	58280	56730	49890	46440	45850	53940	89660	184380	221840	94810	62660	58250
MEAN	1880	1891	1609	1498	1581	1740	2989	5948	7395	3058	2021	1942
MAX	2030	2060	1790	1640	1770	2060	4210	9770	10900	5750	2420	2750
MIN	1750	1630	1270	1360	1400	1540	1770	3250	5370	1980	1870	1670
AC-FT	115600	112500	98960	92110	90940	107000	177800	365700	440000	188100	124300	115500

CAL YR 1987 TOTAL 1159580 MEAN 3177 MAX 11400 MIN 1270 AC-FT 2300000
WTR YR 1988 TOTAL 1022730 MEAN 2794 MAX 10900 MIN 1270 AC-FT 2029000

09095500 COLORADO RIVER NEAR CAMEO, CO

LOCATION.--Lat 39°14'20", long 108°16'00", in SW¼SW¼ sec.30, T.9 S., R.97 W., Mesa County, Hydrologic Unit 14010006, on left bank 100 ft north of Interstate 70, 0.5 mi upstream from Jackson Canyon, 5.9 mi upstream from Grand Valley project diversion dam, and 7 mi northeast of Cameo.

DRAINAGE AREA.--8,050 mi^2, approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1933 to current year.

REVISED RECORDS.--WRD Colo. 1973: 1970.

GAGE.--Water-stage recorder. Datum of gage is 4,813.73 ft above National Geodetic Vertical Datum of 1929. (Levels by Colorado Department of Highways). Prior to Oct. 10, 1934, nonrecording gage on river and water-stage recorder on Highline Canal, about 10 mi downstream at different datum. Oct. 10, 1934, to Feb. 27, 1958, water-stage recorder at site 3.0 mi downstream at datum 22.55 ft, lower.

REMARKS.--Estimated daily discharges: Dec. 26 to Feb. 23. Records good except for estimated daily discharges, which are fair. Natural flow of stream affected by transmountain diversions, storage reservoirs, power development, and diversion for irrigation of about 160,000 acres.

AVERAGE DISCHARGE.--55 years, 3,948 ft^3/s; 2,860,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 39,300 ft^3/s, May 26, 1984, gage height, 14.36 ft, minimum daily, 700 ft^3/s, Dec. 29, 1939.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 13,000 ft^3/s at 1745 June 7, gage height, 7.97 ft, minimum daily, 1,380 ft^3/s, Dec. 16.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2050	1990	1820	1790	1700	2060	2010	3890	7710	5630	2390	1990
2	2040	2130	1810	1800	1700	2000	1950	4600	6680	5230	2380	1950
3	2040	2210	1880	1700	1700	1980	1960	4350	6430	5040	2270	1900
4	2040	2170	1990	1670	1650	1960	2020	3910	7970	4820	2130	1880
5	2050	2150	1990	1600	1580	1920	2210	3730	10600	4650	2060	1800
6	2080	2300	2020	1520	1560	1810	2490	3830	12100	4390	2060	1800
7	2060	2230	1960	1550	1570	1890	2480	4250	12100	4120	2120	1800
8	2050	2310	1940	1680	1600	1910	2620	4080	11600	3690	2170	1770
9	2050	2330	1920	1720	1650	1800	2960	3860	11100	3450	2130	1760
10	2060	2260	1920	1760	1700	1840	2890	3610	10400	3260	2070	1860
11	2080	2210	1920	1780	1720	1880	2700	3510	10000	3190	2050	1940
12	2020	2210	1900	1800	1700	1800	2640	3600	9410	3130	2090	2510
13	2060	2120	1780	1780	1650	1720	2790	4180	8500	2940	2110	2860
14	2170	2110	1540	1700	1700	1700	3220	5480	7570	2730	2130	2620
15	2200	2160	1520	1600	1700	1670	3480	6910	6560	2540	2130	2450
16	2150	2140	1380	1500	1700	1840	3690	7380	6500	2420	2160	2280
17	2090	2110	1440	1550	1700	1740	3820	8920	6410	2340	2210	2150
18	2110	2070	1730	1650	1650	1760	4090	10200	6420	2320	2190	2090
19	2110	2050	1770	1700	1720	1750	3880	10900	6310	2230	2170	2010
20	2100	1940	1890	1650	1660	1750	3840	10300	6780	2080	2130	2030
21	2070	2000	1790	1660	1720	1800	3910	8830	6900	2040	2150	2090
22	2000	2030	1650	1700	1800	1910	4190	7380	6940	2080	2300	2040
23	2000	2040	1700	1600	1720	1930	4000	6320	6500	2070	2190	2020
24	1980	2020	1880	1500	1660	2000	3810	5890	6730	2090	2160	2010
25	2050	2000	1840	1600	1610	2020	3520	6080	6710	2090	2100	1950
26	1980	1970	1800	1620	1700	1970	3350	6640	6200	2090	2060	1940
27	1910	1970	1750	1680	1730	1990	3260	7210	5710	2080	2030	1950
28	1960	1940	1700	1720	1850	2070	3200	7940	5310	2080	2000	1910
29	1950	1850	1700	1740	1930	2300	3230	8880	5600	2020	2050	1930
30	1960	1820	1750	1700	---	2120	3340	9930	6060	2110	2080	1950
31	1960	---	1780	1700	---	2150	---	9290	---	2210	2070	---
TOTAL	63430	62810	55460	51720	49030	59040	93550	196440	233810	93160	66340	61240
MEAN	2046	2094	1789	1668	1691	1905	3118	6337	7794	3005	2140	2041
MAX	2200	2330	2020	1800	1930	2300	4190	10900	12100	5630	2390	2860
MIN	1910	1820	1380	1500	1560	1670	1950	3510	5310	2020	2000	1760
AC-FT	125800	124600	110000	102600	97250	117100	185600	389600	463800	184800	131600	121500

CAL YR 1987 TOTAL 1217210 MEAN 3335 MAX 12400 MIN 1380 AC-FT 2414000
WTR YR 1988 TOTAL 1086030 MEAN 2967 MAX 12100 MIN 1380 AC-FT 2154000

09095500 COLORADO RIVER NEAR CAMEO, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1933 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: December 1935 to current year.
WATER TEMPERATURES: April 1949 to current year.

INSTRUMENTATION.--Water-quality monitor since October 1982.

REMARKS.--Daily maximum and minimum specific-conductance data available in district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 1,970 microsiemens Jan. 19, 1940; minimum, 230 microsiemens June 2, 3, 1984.
WATER TEMPERATURES: Maximum, 25.0°C July 27, 1987; minimum, 0.0°C on many days during winter months.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum recorded, 1,480 microsiemens Dec. 28; minimum, 310 microsiemens June 7 and 8.
WATER TEMPERATURES: Maximum recorded, 24.1°C August 4; minimum, 0.0°C many days in winter months.

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO
OCT											
21...	1400	1970	1170	8.3	8.0	270	120	75	20	120	3
NOV											
18...	1300	1930	1140	8.3	1.5	270	120	74	20	120	3
DEC											
09...	1200	1820	1090	8.4	2.0	270	120	75	20	115	4
JAN											
28...	1300	1720	1240	8.0	0.0	260	97	73	19	140	4
FEB											
26...	1300	1700	1140	8.3	3.5	260	113	71	19	140	4
MAR											
16...	1400	1870	1370	8.2	4.0	260	120	72	20	140	4
APR											
20...	1300	3800	667	8.2	12.0	180	66	50	13	66	2
MAY											
18...	1200	9980	380	8.0	11.5	120	27	34	8.3	26	1
JUN											
15...	1300	6600	491	8.2	13.5	140	43	40	9.7	40	2
JUL											
20...	1300	2070	935	8.5	20.0	230	95	66	17	110	3
AUG											
31...	1000	1980	1020	8.7	18.5	230	93	65	16	110	3
SEP											
22...	1200	2080	1020	8.5	14.5	250	112	69	19	110	3

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)
OCT										
21...	4.1	151	170	170	0.40	7.0	657	0.89	3490	<0.10
NOV										
18...	2.8	150	170	170	0.40	8.4	656	0.89	3420	0.10
DEC										
09...	3.9	152	160	170	0.40	8.0	659	0.90	3240	--
JAN										
28...	4.6	164	170	200	0.30	8.7	715	0.97	3310	0.33
FEB										
26...	4.1	144	160	180	0.40	7.9	670	0.91	3060	0.20
MAR										
16...	1.4	146	160	200	0.40	7.1	688	0.94	3480	<0.10
APR										
20...	2.8	113	95	78	0.30	9.6	384	0.52	3940	0.27
MAY										
18...	1.6	92	47	29	0.30	8.3	211	0.29	5680	0.22
JUN										
15...	1.6	97	65	46	0.30	7.1	269	0.37	4830	0.16
JUL										
20...	3.3	140	130	140	0.30	7.8	558	0.76	3120	<0.10
AUG										
31...	3.5	130	130	160	0.30	7.0	570	0.77	3050	<0.10
SEP										
22...	3.5	141	150	150	0.30	7.5	594	0.81	3340	<0.10

09095500 COLORADO RIVER NEAR CAMEO, CO--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1130	1250	1150	1230	1100	---	---	759	405	529	---	---
2	1130	1230	1160	1250	1090	---	---	650	448	538	---	---
3	1130	1200	1160	1300	1080	1110	---	602	484	556	---	---
4	1130	1150	1130	1360	1090	1090	---	626	449	567	---	---
5	1140	1150	1080	1400	1110	1060	---	659	369	589	---	---
6	1140	1140	1070	1390	1120	1060	---	688	341	602	---	---
7	1130	1150	1060	1310	1130	1080	---	695	329	636	---	---
8	1150	1100	1070	1240	1150	1060	880	700	324	675	---	---
9	1150	1070	1080	1190	1160	1070	849	705	335	708	---	---
10	1140	1110	1130	1210	1170	1140	790	713	338	733	---	---
11	1130	1150	1120	1220	1170	1070	810	715	349	758	---	---
12	1120	1140	1120	1230	1170	1060	859	713	359	754	---	---
13	1130	1100	1140	1240	1170	1090	857	659	390	740	---	---
14	1130	1130	---	1300	1190	1110	841	598	410	772	---	---
15	1160	1130	---	1370	---	1120	779	529	464	832	---	---
16	1100	1140	---	1270	---	---	727	493	476	872	---	---
17	1130	1130	---	1170	---	1100	690	506	477	---	---	---
18	1150	1140	---	1140	---	1110	670	---	477	---	---	---
19	1160	1140	1290	1140	---	1100	658	---	481	---	---	---
20	1170	1160	1240	1160	---	1110	673	---	473	---	---	---
21	1170	1190	1200	1190	---	---	680	---	448	---	---	---
22	1190	1170	1220	1240	---	---	671	---	462	---	---	---
23	1220	1170	1260	1270	---	---	658	---	481	---	---	1040
24	1230	1150	1250	1280	---	---	685	---	493	---	---	1020
25	1240	1110	1260	1300	---	---	722	496	470	---	---	1010
26	1240	1090	1310	1250	---	---	752	475	481	---	---	1020
27	1250	1110	1410	1260	---	---	786	451	503	---	---	1030
28	1260	1100	1440	1250	---	---	811	424	558	---	---	1020
29	1240	1110	1330	1210	---	---	816	397	575	---	---	1020
30	1240	1150	1300	1150	---	---	808	369	536	---	---	1010
31	1260	---	1250	1110	---	---	---	359	---	---	---	---
MEAN	1170	1140	---	1250	---	---	---	---	439	---	---	---

09095500 COLORADO RIVER NEAR CAMEO, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	15.2	11.6	11.7	9.8	1.3	.0	.0	.0	.0	.0	---	---
2	15.0	11.4	11.2	10.2	1.3	.0	.0	.0	.0	.0	---	---
3	15.0	11.4	11.8	9.9	2.6	.4	.0	.0	.0	.0	8.3	5.2
4	14.5	11.2	11.6	9.0	2.8	1.1	.0	.0	.0	.0	8.8	6.4
5	14.5	11.0	10.4	8.2	3.0	1.8	.0	.0	.0	.0	6.8	4.1
6	14.7	11.2	10.7	8.8	4.7	2.9	.0	.0	.0	.0	7.1	4.1
7	14.4	11.1	9.9	8.6	5.0	3.3	.0	.0	.0	.0	6.6	4.6
8	14.2	11.4	9.8	7.5	3.8	2.5	.0	.0	.0	.0	6.0	2.7
9	14.0	10.8	9.4	6.9	2.6	.0	.0	.0	.0	.0	7.1	3.6
10	13.6	10.8	8.3	6.3	3.2	1.3	.0	.0	.0	.0	5.9	4.4
11	13.8	10.7	8.5	5.7	3.7	2.3	.0	.0	.0	.0	4.7	3.1
12	13.0	10.4	7.6	5.7	2.3	1.0	.0	.0	.2	.0	4.6	2.0
13	12.1	11.1	7.4	5.4	.9	.0	.0	.0	.3	.0	4.7	1.9
14	11.8	9.6	7.1	6.5	.0	.0	.0	.0	.3	.1	4.3	.9
15	13.4	10.9	6.7	5.1	.0	.0	.0	.0	---	---	5.2	2.3
16	12.9	10.4	5.0	3.3	.0	.0	.0	.0	---	---	4.6	3.2
17	12.1	9.1	4.2	2.4	.0	.0	.0	.0	---	---	5.2	1.8
18	11.7	8.9	2.5	.9	.0	.0	.0	.0	---	---	6.0	2.0
19	11.2	8.5	2.1	.1	.4	.0	.0	.0	---	---	7.2	2.8
20	10.5	7.8	2.2	.0	.9	.0	.0	.0	---	---	8.6	4.1
21	9.7	6.9	2.1	.4	.3	.0	.0	.0	---	---	9.6	5.3
22	8.9	6.4	2.1	.5	.0	.0	.0	.0	---	---	9.6	6.7
23	8.9	6.2	3.3	1.0	.0	.0	.0	.0	---	---	9.3	6.3
24	9.2	7.5	3.8	1.9	.0	.0	.0	.0	---	---	9.5	6.7
25	10.8	8.5	2.9	1.5	.0	.0	.0	.0	---	---	9.3	5.7
26	10.9	8.3	2.4	1.6	.0	.0	.0	.0	---	---	10.8	6.7
27	11.3	8.6	2.8	.9	.0	.0	.0	.0	---	---	10.8	7.3
28	10.2	8.5	2.4	.9	.0	.0	.0	.0	---	---	8.7	6.2
29	10.4	8.7	1.9	.2	.0	.0	.0	.0	---	---	7.3	4.1
30	10.9	9.4	1.4	.0	.0	.0	.0	.0	---	---	6.4	4.6
31	10.5	8.5	---	---	.0	.0	.0	.0	---	---	6.7	4.3
MONTH	15.2	6.2	11.8	.0	5.0	.0	.0	.0	---	---	---	---
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	8.3	4.5	13.4	10.6	12.6	9.8	22.2	16.5	22.2	19.3	22.0	17.4
2	9.7	5.0	12.8	9.3	14.4	11.1	20.4	17.1	22.3	19.1	22.5	17.2
3	10.7	6.5	12.3	8.8	16.4	13.0	22.0	17.2	24.0	19.8	22.0	17.3
4	9.6	8.3	12.7	10.5	17.0	14.2	19.3	17.9	24.1	19.9	21.1	17.0
5	11.0	7.4	13.7	11.5	16.4	14.6	19.0	15.8	23.9	19.7	20.8	16.6
6	12.3	8.0	12.2	10.0	15.1	13.1	22.2	17.2	24.0	20.3	22.0	16.4
7	13.3	9.0	11.7	9.0	15.4	12.8	---	---	23.1	19.8	19.9	16.2
8	12.4	9.9	12.0	10.3	15.7	12.9	---	---	22.9	19.1	22.0	16.1
9	10.6	8.0	13.4	10.8	16.1	13.1	22.0	18.9	22.8	18.6	19.9	16.1
10	9.8	7.2	14.6	11.4	16.3	13.7	---	---	22.0	18.2	18.5	16.7
11	10.8	7.1	15.5	12.1	15.4	13.7	---	---	23.1	18.3	16.6	14.6
12	12.4	8.0	16.3	13.3	15.7	12.7	21.4	18.0	22.3	19.3	14.5	12.9
13	13.4	9.5	16.4	13.9	15.7	13.7	22.6	18.1	22.5	18.6	14.4	12.0
14	13.6	11.1	16.7	13.9	15.9	12.6	22.8	18.7	22.5	18.1	14.8	12.6
15	13.7	11.4	15.6	13.2	17.0	13.9	---	---	22.1	18.8	15.7	12.3
16	12.6	11.2	15.0	12.6	17.4	14.7	23.2	19.1	22.7	19.3	16.6	12.6
17	11.3	10.1	14.0	12.4	17.3	14.9	22.9	19.8	22.3	19.4	17.0	13.2
18	11.7	8.9	12.6	11.4	17.9	15.2	23.0	18.9	22.7	18.3	16.5	13.9
19	12.7	10.3	11.6	10.5	18.6	15.7	23.1	19.0	23.3	18.8	14.6	11.4
20	12.9	11.8	11.1	9.4	19.4	16.0	23.3	18.9	22.0	18.8	15.4	11.3
21	12.1	10.4	11.5	9.1	19.7	16.8	23.5	19.1	21.6	19.0	16.4	13.4
22	11.3	9.4	12.5	9.5	19.8	16.4	23.5	19.3	22.7	18.4	17.0	13.9
23	11.1	9.8	14.0	10.9	22.2	17.1	22.0	19.8	23.1	18.7	16.7	13.4
24	10.8	9.2	14.9	12.3	22.0	17.8	23.6	19.1	23.6	19.2	16.5	13.0
25	11.2	9.2	15.4	13.5	20.1	17.6	23.2	19.6	23.5	19.6	16.5	12.9
26	11.1	8.0	15.5	13.1	19.8	17.5	23.5	19.6	23.0	19.6	15.0	12.9
27	12.4	8.8	14.5	12.7	19.9	16.9	23.3	19.7	22.8	19.0	15.5	12.2
28	13.3	10.5	15.0	11.9	19.7	18.1	23.0	19.6	22.2	18.7	14.7	12.1
29	14.5	11.4	14.1	12.2	---	---	23.7	19.4	21.5	17.9	13.9	10.7
30	15.2	12.3	12.4	11.0	19.4	16.7	23.9	19.3	22.0	18.1	14.6	10.8
31	---	---	11.9	9.2	---	---	23.9	20.1	22.0	17.9	---	---
MONTH	15.2	4.5	16.7	8.8	---	---	---	---	24.1	17.9	22.5	10.7

09095500 COLORADO RIVER NEAR CAMEO, CO--Continued

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT					
08...	1200	2050	27	149	72
14...	1000	2170	154	902	95
21...	1400	1970	38	202	67
28...	1000	1970	46	245	63
NOV					
05...	1300	2150	39	226	89
12...	1000	2290	40	247	79
18...	1300	1930	25	130	75
25...	1100	1950	19	100	67
DEC					
02...	1200	1820	13	64	72
09...	1200	1820	43	211	86
FEB					
26...	1300	2000	213	1150	89
MAR					
02...	1200	1970	281	1490	91
09...	1300	1730	35	163	82
16...	1400	1800	34	165	75
23...	1200	1980	106	567	84
30...	0935	2030	63	345	81
APR					
06...	1300	2550	80	551	79
13...	1300	2790	96	723	78
20...	1300	3800	224	2300	76
27...	1010	3190	96	827	81
MAY					
04...	1300	3850	336	3490	90
11...	1300	3440	87	808	91
18...	1200	9980	859	23100	71
25...	1100	5960	114	1830	75
JUN					
01...	1100	7740	146	3050	59
08...	1300	11400	255	7850	57
15...	1300	6660	76	1370	57
22...	1300	6770	47	859	67
29...	0940	5230	1950	27500	92
JUL					
06...	1000	4520	92	1120	83
13...	1200	3000	17	138	57
20...	1300	2070	28	156	59
27...	1300	2130	103	592	94
AUG					
03...	1100	2400	147	953	97
10...	1230	2250	40	243	88
17...	0930	2210	39	233	87
24...	0900	2210	123	734	95
31...	1000	2130	48	276	89
SEP					
09...	1110	1750	23	109	87
16...	1200	2290	131	810	84
22...	1200	2010	108	586	91
30...	1000	1920	25	130	83

09105000 PLATEAU CREEK NEAR CAMEO, CO

LOCATION.--Lat 39°11'00", long 108°16'02", in SW¼SW¼ sec.18, T.10 S., R.97 W., Mesa County, Hydrologic Unit 14010005, on left bank 300 ft from State Highway 65, 1.15 mi upstream from mouth and 4 mi northeast of Cameo.

DRAINAGE AREA.--592 mi².

PERIOD OF RECORD.--October 1935 to September 1983. October 1985 to current year. Prior to May 1936, monthly discharges only, published in WSP 1313.

REVISED RECORDS.--WSP 979: 1942. WSP 2124: Drainage area. WDR-CO-83-2: 1973 (M), 1975 (M).

GAGE.--Water-stage recorder. Elevation of gage is 4,840 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Aug. 27, 1936, nonrecording gage.

REMARKS.--Estimated daily discharges: Dec. 27 to Feb. 20. Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by storage reservoirs, diversions for irrigation of about 25,000 acres, return flow from irrigated areas, and for power development. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--51 years (water years 1935-83, 1986-88) 191 ft³/s; 138,400 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,010 ft³/s, June 22, 1983, gage height, 8.51 ft; maximum gage height, 8.59 ft, May 28, 1983; minimum daily discharge, 8.2 ft³/s, Aug. 15, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 820 ft³/s, at 0500 May 19, gage height 4.06 ft; minimum daily, 56 ft³/s, Feb. 6.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	112	136	103	84	64	144	84	245	163	108	61	76
2	113	153	108	82	61	135	85	223	148	95	62	78
3	119	136	105	80	62	130	92	192	147	95	62	77
4	111	126	107	73	61	128	112	186	161	100	61	77
5	111	122	120	74	58	109	111	165	185	140	67	76
6	111	162	125	75	56	107	126	189	196	121	69	76
7	111	155	132	77	58	122	161	177	170	133	77	74
8	115	145	119	80	57	94	212	156	139	99	76	72
9	113	135	100	80	63	96	174	144	131	96	72	74
10	119	128	120	82	63	113	145	146	120	94	70	79
11	119	125	120	84	59	96	141	170	115	98	70	100
12	121	124	106	80	59	87	155	235	112	86	74	231
13	133	120	111	78	58	96	189	290	107	85	71	260
14	153	121	114	72	58	89	196	334	114	77	71	146
15	153	135	96	73	60	104	234	357	136	74	70	121
16	142	120	104	76	62	110	223	320	96	73	69	113
17	138	122	135	74	61	95	223	372	93	75	65	107
18	137	108	136	73	59	84	196	625	98	74	67	106
19	140	117	109	69	63	86	175	627	94	66	66	106
20	142	127	95	64	62	91	166	351	93	64	63	100
21	144	122	94	64	65	99	190	242	88	63	67	100
22	143	118	95	64	66	115	192	230	81	60	82	113
23	136	115	95	63	67	116	166	197	77	61	67	117
24	130	117	104	60	68	115	182	209	74	63	66	109
25	144	109	92	59	70	101	181	187	72	62	65	103
26	136	120	93	58	77	106	167	165	77	63	94	101
27	135	115	86	59	83	127	156	169	86	62	109	100
28	129	97	80	60	119	152	161	191	91	59	84	98
29	127	110	85	62	117	92	170	213	139	63	85	98
30	136	101	86	63	---	107	205	243	154	66	83	105
31	137	---	85	64	---	100	---	200	---	61	74	---
TOTAL	4015	3741	3254	2210	1930	3345	4970	7711	3527	2490	2229	3193
MEAN	130	125	105	71.3	66.6	108	166	249	118	80.3	71.9	106
MAX	153	162	136	84	119	152	234	627	196	140	109	260
MIN	111	97	80	58	56	84	84	144	72	59	61	72
AC-FT	7960	7420	6450	4380	3830	6630	9860	15290	7000	4940	4420	6330

CAL YR 1987 TOTAL 96665 MEAN 265 MAX 2000 MIN 80 AC-FT 191700
WTR YR 1988 TOTAL 42615 MEAN 116 MAX 627 MIN 56 AC-FT 84530

09107000 TAYLOR RIVER AT TAYLOR PARK, CO

LOCATION.--Lat 38°51'37", long 106°33'58", in NW¼NE¼ sec.5, T.14 S., R.82 W., Gunnison County, Hydrologic Unit 14020001, on left bank 0.2 ft upstream from Taylor Park Reservoir waterline, 2.7 mi north of Taylor Park, and 21 mi northeast of Almont.

DRAINAGE AREA.--128 mi², revised.

PERIOD OF RECORD.--June 1929 to Sept. 1934, Oct. 1987 to current year. Records for 1929-1934 provided by Colorado Division of Water Resources, published in WSP 1313.

GAGE.--Water-stage recorder. Elevation of gage is 9,340 ft above National Geodetic Vertical Datum of 1929, from topographic map. June 1929 to Sept. 1934 water-stage recorder at different datum at site flooded by waters of Taylor Park Reservoir since 1937.

REMARKS.--Estimated daily discharges: Nov. 19-22, 28-30, Dec. 1, 2, 9, 10, 13-18, 28-31, Jan. 1, 11-29, Feb. 1-27, Mar. 12-20. Records good except for estimated daily discharges, which are poor. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--6 years (water years 1930-34, 1988), 90.2 ft³/s; 65,350 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 1,020 ft³/s, May 31, 1933, gage height, 2.80 ft, from rating curve extended above 480 ft³/s, site and datum then in use; minimum discharge not determined.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 447 ft³/s at 2300 June 6, gage height, 2.91 ft; minimum daily, 32 ft³/s, Feb. 4.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	64	61	40	42	35	51	41	120	192	159	87	46
2	61	66	40	43	34	50	45	98	210	143	77	47
3	61	64	41	41	34	49	51	81	270	140	72	42
4	59	56	41	41	32	49	58	92	330	156	67	39
5	58	54	41	41	34	55	60	104	351	138	62	39
6	58	61	40	42	36	51	67	106	350	128	61	38
7	58	60	42	44	37	47	96	87	349	118	63	38
8	58	55	40	43	38	53	88	91	347	111	61	37
9	59	49	40	41	39	53	70	84	338	106	54	36
10	60	49	40	39	37	51	61	98	330	105	52	38
11	59	52	40	40	37	47	69	111	318	130	51	64
12	57	45	41	41	38	45	88	146	313	106	51	72
13	59	50	40	40	36	42	101	188	279	96	50	80
14	63	56	40	40	36	41	97	221	233	103	48	69
15	66	47	39	39	36	41	94	251	230	94	47	60
16	64	44	39	37	36	41	94	274	230	89	53	57
17	57	47	39	35	35	42	90	300	228	95	67	52
18	56	38	40	36	35	42	89	327	218	79	76	53
19	57	38	40	36	35	43	88	268	229	77	58	49
20	52	38	46	37	35	44	93	204	237	73	53	47
21	52	40	43	37	36	45	101	173	238	67	52	48
22	52	43	42	38	38	46	79	159	223	65	60	50
23	53	46	44	38	37	47	73	159	205	62	53	48
24	61	45	42	38	39	46	73	190	213	61	48	46
25	73	45	44	37	40	44	68	218	199	60	46	44
26	64	44	46	36	43	46	65	244	185	64	45	42
27	58	43	43	37	45	55	71	257	177	80	46	42
28	56	42	41	38	49	58	78	262	200	69	48	42
29	60	41	40	38	49	46	82	295	253	82	46	40
30	65	42	42	37	---	45	102	286	188	99	45	41
31	64	---	42	36	---	42	---	216	---	119	45	---
TOTAL	1844	1461	1278	1208	1091	1457	2332	5700	7663	3063	1744	1446
MEAN	59.5	48.7	41.2	39.0	37.6	47.0	77.7	184	255	98.8	56.3	48.2
MAX	73	66	46	44	49	58	102	327	351	159	87	80
MIN	52	38	39	35	32	41	41	81	177	60	45	36
AC-FT	3660	2900	2530	2400	2160	2890	4630	11310	15200	6080	3460	2870

WTR YR 1988 TOTAL 30287 MEAN 82.8 MAX 351 MIN 32 AC-FT 60070

09107500 TEXAS CREEK AT TAYLOR PARK, CO

LOCATION.--Lat 38°50'51", long 106°33'13", in SE¼NW¼ sec.9, T.14 S., R.82 W., Gunnison County, Hydrologic Unit 14020001, on right bank 150 ft upstream from bridge on county road 742, 1.8 mi north of Taylor Park, and 20 mi northeast of Almont.

DRAINAGE AREA.--40.4 mi², revised.

PERIOD OF RECORD.--June 1929 to Sept. 1934, Sept. 1987-Oct. 1988. Records for 1929-1934 provided by Colorado Division of Water Resources, published in WSP 1313.

GAGE.--Water-stage recorder. Datum of gage is 9,380 ft above National Geodetic Vertical Datum of 1929, from topographic map. June 1929 to Sept. 1934 water-stage recorder at different datum and site flooded by waters of Taylor Park Reservoir since 1937.

REMARKS.--Estimated daily discharges: Nov. 15-Feb. 26. Records fair except for estimated daily discharges, which are poor. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--6 years (water years 1930-34, 1988), 37.4 ft³/s; 27,100 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 353 ft³/s, June 15, 1929; minimum discharge not determined.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 212 ft³/s at 0100 June 7, gage height, 3.53 ft; minimum daily, 4.0 ft³/s, Feb. 13-26.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	14	7.0	10	9.0	7.1	7.9	36	64	81	43	20
2	13	15	7.0	10	9.0	7.3	8.8	25	80	62	61	21
3	12	14	8.0	10	9.0	6.9	10	21	125	57	43	19
4	12	12	9.0	10	9.0	6.8	12	21	159	54	33	17
5	12	12	9.0	10	8.0	6.5	11	22	159	57	29	16
6	12	15	12	10	8.0	7.0	14	27	151	51	28	15
7	12	13	12	10	7.0	7.2	20	21	169	45	27	15
8	12	11	12	10	6.0	6.7	20	21	155	45	25	14
9	12	11	12	10	6.0	6.8	15	20	150	41	24	12
10	12	11	12	10	5.0	6.8	14	21	154	42	21	13
11	12	14	11	10	5.0	7.1	16	23	147	46	20	24
12	12	11	11	10	5.0	6.6	21	39	126	40	23	24
13	13	13	11	10	4.0	6.8	25	60	114	36	21	24
14	17	13	11	10	4.0	6.3	23	86	87	34	18	23
15	18	11	11	10	4.0	6.9	24	106	94	33	17	22
16	17	10	11	10	4.0	6.8	25	117	98	33	20	20
17	13	9.0	11	10	4.0	6.5	25	118	99	31	42	18
18	13	8.0	11	10	4.0	6.3	23	104	93	29	35	17
19	12	8.0	11	10	4.0	6.5	25	107	102	28	28	16
20	9.8	8.0	11	10	4.0	6.7	22	80	106	26	24	15
21	9.0	7.0	11	9.0	4.0	7.1	24	60	108	24	23	15
22	10	7.0	11	9.0	4.0	7.4	20	47	101	23	25	15
23	11	7.0	11	9.0	4.0	7.7	17	42	109	21	22	15
24	13	7.0	11	9.0	4.0	7.4	17	56	105	21	21	15
25	15	7.0	10	9.0	4.0	7.2	16	74	96	20	19	15
26	14	7.0	10	9.0	4.0	8.2	15	70	103	22	20	14
27	12	7.0	10	9.0	4.5	10	15	79	91	39	28	14
28	12	7.0	10	9.0	7.2	11	17	100	80	34	26	13
29	14	7.0	10	9.0	7.0	6.8	16	126	152	36	22	12
30	15	7.0	10	9.0	---	8.2	24	121	104	34	21	11
31	14	---	10	9.0	---	6.4	---	76	---	52	20	---
TOTAL	401.8	303.0	324.0	299.0	160.7	223.0	542.7	1926	3481	1197	829	504
MEAN	13.0	10.1	10.5	9.65	5.54	7.19	18.1	62.1	116	38.6	26.7	16.8
MAX	18	15	12	10	9.0	11	25	126	169	81	61	24
MIN	9.0	7.0	7.0	9.0	4.0	6.3	7.9	20	64	20	17	11
AC-FT	797	601	643	593	319	442	1080	3820	6900	2370	1640	1000

WTR YR 1988 TOTAL 10191.2 MEAN 27.8 MAX 169 MIN 4.0 AC-FT 20210

09108500 TAYLOR PARK RESERVOIR AT TAYLOR PARK, CO

LOCATION.--Lat 38°49'07", long 106°36'24", Gunnison County, Hydrologic Unit 14020001, at dam on Taylor River just downstream from Taylor Park, 16 mi northeast of Almont.

DRAINAGE AREA.--254 mi².

PERIOD OF RECORD.--October 1937 to current year. Prior to October 1938, published in WSP 1313.

REVISED RECORDS.-- WSP 1089: 1940(M), 1942(M), 1945-46. WSP 1924: Drainage area.

GAGE.--Nonrecording gage read once daily. Datum of gage is 9,187 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation); gage readings have been reduced to elevations above National Geodetic Vertical Datum of 1929.

REMARKS.--Reservoir is formed by an earth and rockfill dam. Dam completed by U. S. Bureau of Reclamation in September 1937. Capacity of reservoir, 106,200 acre-ft between elevations 9,187 ft, bottom of outlet gates, and 9,330 ft, crest of spillway. No dead storage. Water used for irrigation in Uncompahgre Valley. Figures given are usable contents.

COOPERATION.--Records provided by Uncompahgre Valley Water Users Association.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 111,000 acre-ft, July 1, 1957, elevation, 9,332.35 ft; minimum after first filling, 8,780 acre-ft, Oct. 19-20, 1956, elevation, 9,240.70 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 102,600 acre-ft, July 1-2, elevation, 9,330.10 ft; minimum contents, 74,900 acre-ft, Dec. 23 to Jan. 31, elevation, 9,313.20 ft.

MONTHEND ELEVATION IN FEET NGVD AND CONTENTS, AT 1800, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

Date	Elevation	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	9,316.80	81,000	--
Oct. 31	9,314.40	76,900	-4,100
Nov. 30	9,313.40	75,200	-1,700
Dec. 31	9,313.20	74,900	-300
CAL YR 1987	-	-	-1,800
Jan. 31	9,313.20	74,900	0
Feb. 29	9,313.30	75,000	+100
Mar. 31	9,313.30	75,000	0
Apr. 30	9,316.10	79,800	+4,800
May 31	9,317.20	81,700	+1,900
June 30	9,327.70	101,400	+19,700
July 31	9,323.90	94,000	-7,400
Aug. 31	9,320.70	87,100	-6,900
Sept. 30	9,316.40	80,300	-6,800
WTR YR 1988	-	-	-700

09109000 TAYLOR RIVER BELOW TAYLOR PARK RESERVOIR, CO

LOCATION.--Lat 38°49'06", long 106°36'31", Gunnison County, Hydrologic Unit 14020001, on left bank 1,000 ft downstream from Taylor Park Reservoir Dam, 3.4 mi upstream from Lottis Creek, and 17 mi northeast of Almont.

DRAINAGE AREA.--254 mi².

PERIOD OF RECORD.--June 1929 to September 1934 (monthly discharges only, published in WSP 1313), October 1938 to current year.

REVISED RECORDS.--WSP 1924: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 9,169.67 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation). Prior to Nov. 11, 1952, at site 1,600 ft downstream, at datum 1.00 ft, lower. Oct. 15, 1946, to May 4, 1952, supplementary nonrecording gage just downstream from reservoir outlet at different sites and datums used during winter months.

REMARKS.--Estimated daily discharges: Nov. 16 to Apr. 25. Records good, except for estimated daily discharges, which are fair. Flow regulated by Taylor Park Reservoir (station 09108500) since 1937. One small diversion for irrigation from Willow Creek upstream from reservoir. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--5 years (water years 1930-34), [illegible] ft³/s; [illegible] acre-ft/yr. [illegible] years (water years 1939-88), 199 ft³/s; 144,200 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, [illegible] ft³/s, June [illegible], gage height, [illegible] ft; no flow May 1 to July 3, 1940, May 7-23, 1941, May 5-21, [illegible].

EXTREMES FOR CURRENT YEAR.--Maximum discharge, [illegible] ft³/s, at [illegible], gage height, [illegible] ft; minimum daily, 53 ft³/s, Sept. 27, 28.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	[illegible]	134	75	75	75	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	254
2	318	[illegible]	75	75	75	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	262
3	319	[illegible]	75	75	75	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	253
4	313	[illegible]	75	75	75	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	254
5	321	[illegible]	75	75	75	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	253
6	[illegible]	[illegible]	75	75	75	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	256
7	274	[illegible]	75	75	75	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	254
8	[illegible]	[illegible]	75	75	75	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	251
9	183	[illegible]	75	75	75	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	251
10	150	[illegible]	75	75	75	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	252
11	123	131	75	75	75	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	252
12	124	130	75	75	75	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	253
13	145	131	75	75	75	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	251
14	[illegible]	131	75	75	75	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	251
15	125	130	75	75	75	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	251
16	153	120	75	75	75	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	251
17	150	120	75	75	75	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	252
18	144	120	75	75	75	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	247
19	144	120	75	75	75	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	246
20	134	120	75	75	75	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	247
21	[illegible]	120	75	75	75	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	253
22	136	120	75	75	75	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	253
23	136	120	75	75	75	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	253
24	136	120	75	75	75	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
25	138	120	75	75	75	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	131
26	137	120	75	75	75	75	75	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
27	136	120	75	75	75	75	75	[illegible]	[illegible]	[illegible]	[illegible]	53
28	135	120	75	75	75	75	75	[illegible]	[illegible]	[illegible]	[illegible]	53
29	111	100	75	75	75	75	75	[illegible]	[illegible]	[illegible]	[illegible]	118
30	92	75	75	75	---	75	119	[illegible]	[illegible]	[illegible]	[illegible]	104
31	134	---	75	75	---	75	---	[illegible]	---	[illegible]	[illegible]	---
TOTAL	5511	3714	2325	2325	2175	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	6529
MEAN	178	124	75.0	75.0	75.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	218
MAX	321	134	75	75	75	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MIN	92	75	75	75	75	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	53
AC-FT	10930	7370	4610	4610	4310	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	12950

CAL YR 1987 TOTAL 87023 MEAN 238 MAX 507 MIN 75 AC-FT 172600
WTR YR 1988 TOTAL 55841 MEAN 153 MAX 321 MIN 53 AC-FT 110800

09110000 TAYLOR RIVER AT ALMONT, CO

LOCATION.--Lat 38°39'52", long 106°50'41", in NW¼SE¼ sec.22, T.51 N., R.1 E., Gunnison County, Hydrologic Unit 14020001, on left bank at Almont, 15 ft downstream from bridge on State Highway 306, and 800 ft upstream from confluence with East River.

DRAINAGE AREA.--477 mi².

PERIOD OF RECORD.--July 1910 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 1213: 1911. WSP 1924: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 8,010.76 ft above National Geodetic Vertical Datum of 1929. Prior to Apr. 16, 1922, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Nov. 17 to Apr. 4. Records good except for estimated daily discharges, which are poor. Flow partly regulated since September 1937 by Taylor Park Reservoir (station 09108500), 24 mi upstream from station. Diversions for irrigation of about 360 acres upstream from station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--78 years, 339 ft³/s; 245,600 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 3,760 ft³/s, June 9, 1920, gage height, 5.00 ft, from rating curve extended above 2,300 ft³/s; maximum gage height, 5.32 ft, July 1, 1957; minimum discharge observed before storage began in Taylor Park Reservoir, 50 ft³/s for several days in August 1913, gage height, 1.2 ft; minimum daily discharge, subsequent to completion of Taylor Park Dam, 24 ft³/s, Mar. 12, 1939.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 532 ft³/s at 1730 July 30, gage height, 2.64 ft; minimum daily, 120 ft³/s, Nov. 30 to Feb. 20.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	[illegible]	193	[illegible]	120	120	140	140	159	316	332	379	321
2	[illegible]	[illegible]	[illegible]	120	120	140	140	[illegible]	332	[illegible]	352	327
3	[illegible]	194	120	120	120	140	140	[illegible]	[illegible]	[illegible]	[illegible]	322
4	[illegible]	[illegible]	120	120	120	140	140	[illegible]	[illegible]	412	[illegible]	319
5	[illegible]	186	120	120	120	140	153	[illegible]	449	409	330	319
6	[illegible]	192	120	120	120	140	150	367	[illegible]	399	342	315
7	313	193	120	120	120	140	160	358	426	377	367	315
8	[illegible]	197	120	120	120	140	150	[illegible]	[illegible]	372	341	314
9	224	195	120	120	120	140	173	372	[illegible]	367	335	311
10	230	181	120	120	120	140	165	[illegible]	[illegible]	373	331	[illegible]
11	163	136	120	120	120	140	163	379	[illegible]	[illegible]	338	336
12	159	[illegible]	120	120	120	140	189	398	357	363	328	335
13	172	134	120	120	120	140	201	495	377	[illegible]	[illegible]	[illegible]
14	165	151	120	120	120	140	194	413	[illegible]	[illegible]	323	335
15	173	153	120	120	120	140	[illegible]	427	[illegible]	351	374	327
16	199	177	120	120	120	140	194	436	[illegible]	[illegible]	331	324
17	196	180	120	120	120	140	193	[illegible]	314	[illegible]	357	319
18	192	[illegible]	120	120	120	140	[illegible]	509	318	[illegible]	359	318
19	187	150	120	120	120	140	196	514	[illegible]	316	335	311
20	186	150	120	120	120	140	191	427	[illegible]	[illegible]	[illegible]	311
21	173	150	120	120	130	140	195	440	299	[illegible]	[illegible]	311
22	182	150	120	120	130	140	187	437	286	[illegible]	[illegible]	312
23	136	130	120	120	130	140	187	[illegible]	[illegible]	[illegible]	[illegible]	334
24	187	130	120	120	130	140	193	362	277	319	311	281
25	194	140	120	120	131	140	181	356	275	[illegible]	[illegible]	231
26	188	120	120	120	130	140	182	364	281	[illegible]	324	[illegible]
27	183	130	120	120	130	140	184	353	274	343	333	132
28	182	150	120	120	130	140	190	342	287	342	331	130
29	153	150	120	120	130	140	184	354	343	345	327	157
30	143	120	120	120	---	140	222	367	332	357	315	229
31	180	---	120	120	---	140	---	336	---	363	319	---
TOTAL	6825	5439	3720	3720	3570	4340	5329	12075	10196	10991	11382	[illegible]
MEAN	220	181	120	120	123	140	178	390	340	355	[illegible]	289
MAX	356	197	120	120	130	140	222	514	449	412	379	[illegible]
MIN	143	120	120	120	120	140	140	289	274	319	311	130
AC-FT	13540	10770	7380	7380	7080	8610	10570	23950	20220	21800	22590	17210

CAL YR 1987 TOTAL 135733 MEAN 372 MAX 1120 MIN 120 AC-FT 269200
WTR YR 1988 TOTAL 85243 MEAN 233 MAX 514 MIN 120 AC-FT 169100

09112500 EAST RIVER AT ALMONT, CO

LOCATION.--Lat 38°39'52", long 106°50'51", in NW¼SE¼ sec.22, T.51 N., R.1 E., Gunnison County, Hydrologic Unit 14020001, on left bank at Almont, 200 ft upstream from bridge on State Highway 135, and 400 ft upstream from confluence with Taylor River.

DRAINAGE AREA.--289 mi².

PERIOD OF RECORD.--April to October 1905, July 1910 to September 1922, October 1934 to current year. Monthly discharges only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 1313: 1911. WSP 1733: 1952. WSP 1924: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 8,006.29 ft above National Geodetic Vertical Datum of 1929. Apr. 16 to Sept. 30, 1905, and July 27, 1910, to Apr. 30, 1922, nonrecording gages at bridge 200 ft downstream, at different datums. Oct. 1, 1934, to Sept. 22, 1954, water-stage recorder at present site at datum 2.00 ft, higher.

REMARKS.--Estimated daily discharges: Dec.15 to Feb. 3, and Feb. 5-22. Records good except for estimated daily discharges, which are poor. Diversions for irrigation of about 7,400 acres upstream from station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--66 years (water years 1911-22, 1935-88), 341 ft³/s; 247,100 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 6,500 ft³/s, June 15, 1921, gage height, 5.6 ft, site and datum then in use, from rating curve extended above 3,000 ft³/s; minimum daily, 19 ft³/s, Aug. 13, 1913.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,600 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
June 6	0900	*1,[illegible]	*5.23				

Minimum daily, 51 ft³/s, Sept. 1[illegible].

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	79	85	76	70	70	[illegible]	[illegible]	406	[illegible]	[illegible]	[illegible]	[illegible]
2	79	85	74	70	70	64	[illegible]	[illegible]	[illegible]	441	154	[illegible]
3	79	85	69	70	63	64	95	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
4	79	85	66	70	64	61	156	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
5	83	84	73	70	70	[illegible]	107	[illegible]	[illegible]	161	[illegible]	[illegible]
6	81	83	67	70	[illegible]	[illegible]	147	219	[illegible]	[illegible]	[illegible]	[illegible]
7	79	96	71	70	[illegible]	[illegible]	[illegible]	293	[illegible]	[illegible]	[illegible]	[illegible]
8	76	94	69	70	[illegible]	61	178	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
9	66	89	69	70	[illegible]	[illegible]	171	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
10	64	86	70	70	[illegible]	[illegible]	175	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
11	64	90	69	70	70	60	183	586	[illegible]	[illegible]	[illegible]	[illegible]
12	64	87	68	70	70	58	[illegible]	771	[illegible]	714	132	107
13	63	85	57	70	[illegible]	61	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	106
14	71	94	57	70	63	[illegible]	[illegible]	891	768	[illegible]	142	[illegible]
15	75	82	58	70	64	61	296	862	777	[illegible]	127	[illegible]
16	72	75	53	70	68	57	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
17	69	84	58	70	66	[illegible]	374	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
18	67	70	67	70	59	55	313	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
19	67	92	[illegible]	70	[illegible]	55	292	1050	[illegible]	[illegible]	[illegible]	[illegible]
20	67	105	62	70	66	55	306	831	[illegible]	[illegible]	[illegible]	[illegible]
21	64	93	64	70	[illegible]	56	351	699	754	[illegible]	[illegible]	[illegible]
22	65	68	66	70	64	59	308	556	747	141	[illegible]	[illegible]
23	67	91	68	70	63	64	270	529	849	[illegible]	128	92
24	67	90	70	70	64	66	250	616	669	141	121	[illegible]
25	79	79	70	70	63	65	235	773	651	142	115	[illegible]
26	84	88	70	70	64	71	213	881	623	142	114	[illegible]
27	78	80	70	[illegible]	[illegible]	[illegible]	205	977	563	146	[illegible]	[illegible]
28	75	67	70	70	[illegible]	106	234	934	746	144	[illegible]	[illegible]
29	73	81	70	70	64	79	243	1030	690	148	[illegible]	[illegible]
30	82	83	70	70	---	92	334	1050	535	152	113	[illegible]
31	85	---	70	70	---	77	---	815	---	[illegible]	114	---
TOTAL	2263	2581	2044	2170	1955	2010	7008	19644	25430	6900	[illegible]	[illegible]
MEAN	73.0	86.0	65.9	70.0	67.4	64.8	234	634	848	223	[illegible]	[illegible]
MAX	85	105	76	70	70	106	390	1150	1340	461	184	161
MIN	63	67	57	70	63	53	67	254	535	139	[illegible]	[illegible]
AC-FT	4490	5120	4050	4300	3880	3990	13900	38960	50440	13690	[illegible]	[illegible]

CAL YR 1987 TOTAL 110914 MEAN 304 MAX 1710 MIN 57 AC-FT 220000
WTR YR 1988 TOTAL 78819 MEAN 215 MAX 1340 MIN 51 AC-FT 156300

09114500 GUNNISON RIVER NEAR GUNNISON, CO

LOCATION.--Lat 38°32'31", long 106°56'57", in NW¼NW¼ sec.2, T.49 N., R.1 W., Gunnison County, Hydrologic Unit 14020002, on right bank 0.7 mi downstream from Antelope Creek and 1.2 mi west of Gunnison.

DRAINAGE AREA.--1,012 mi².

PERIOD OF RECORD.--October 1910 to December 1928, October 1944 to current year. Monthly discharges only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 1313: 1911, 1916.

GAGE.--Water-stage recorder. Elevation of gage is 7,655 ft above National Geodetic Vertical Datum of 1929, from topographic map. Nov. 25, 1910 to Dec. 31, 1928, nonrecording gages (supplementary water-stage recorder Apr. 29, 1916 to June 17, 1918) at bridge about 0.6 mi downstream at various datums. Oct. 1, 1944 to July 28, 1971, water-stage recorder at sites 3.4 mi upstream at different datum.

REMARKS.--Estimated daily discharges: Nov. 19 to Dec. 12, Dec. 16 to Mar. 23. Records good except for estimated daily discharges, which are poor. Flow regulated by Taylor Park Reservoir (station 09108500), [illegible] mi upstream from station. Diversions for irrigation of about [illegible],000 acres upstream from station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

[illegible].--[illegible] water years [illegible], [illegible], [illegible] ft³/s; [illegible]7,000 acre-ft/yr.

[illegible].--Maximum discharge observed, 11,4[illegible] ft³/s, June 1[illegible], 1918, gage height, 4.05 ft, [illegible], from rating curve extended above [illegible] ft³/s; minimum daily, 80 ft³/s, Dec. 27, [illegible].

[illegible].--Maximum discharge, [illegible] ft³/s at [illegible] June [illegible], gage height, 5.89 ft; minimum daily, [illegible].

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR [illegible] TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1070	574	451
2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1030	555	438
3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	629	440
4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1740	923	583	431
5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	961	568	431
6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2060	958	558	431
7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	713	2190	885	559	403
8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	517	726	[illegible]	822	551	368
9	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	754	1910	757	530	366
10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	673	[illegible]	752	507	346
11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	697	[illegible]	749	493	383
12	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	735	475	405
13	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	834	[illegible]	699	475	458
14	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	580	1363	[illegible]	672	497	437
15	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1490	665	490	413
16	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1360	657	485	431
17	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	548	[illegible]	[illegible]	669	519	396
18	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	565	1980	[illegible]	649	508	392
19	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	625	493	373
20	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	657	[illegible]	[illegible]	616	476	346
21	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	662	469	336
22	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	674	[illegible]	1370	598	472	353
23	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	619	[illegible]	[illegible]	592	470	355
24	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	243	580	[illegible]	[illegible]	579	453	358
25	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	248	557	[illegible]	1190	576	427	299
26	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	282	[illegible]	1443	1160	594	445	240
27	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	535	1580	1150	637	474	212
28	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	298	535	1560	1320	639	475	212
29	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	324	537	1700	1510	644	469	227
30	[illegible]	[illegible]	[illegible]	[illegible]	---	343	640	1770	1190	663	459	311
31	[illegible]	---	[illegible]	[illegible]	---	[illegible]	---	1540	---	720	452	---
TOTAL	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	8400	15703	[illegible]	46020	22805	15789	11042
MEAN	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	271	[illegible]	1178	1534	736	509	368
MAX	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	395	737	1980	2260	1070	674	488
MIN	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	214	272	667	1150	576	427	212
AC-FT	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	16670	31150	72450	91280	45230	31320	21900

CAL YR 1987 TOTAL [illegible] MEAN [illegible] MAX 3160 MIN 219 AC-FT 573900
WTR YR 1988 TOTAL [illegible] MEAN 543 MAX 2260 MIN 179 AC-FT 394000

09118450 COCHETOPA CREEK BELOW ROCK CREEK, NEAR PARLIN, CO

LOCATION.--Lat 38°20'08", long 106°46'18", in SW¼NE¼ sec.17, T.47 N., R.2 E. Saguache County, Hydrologic Unit 14020003, on left bank 0.75 mi downstream from Rock Creek and 12 mi southeast of Parlin.

DRAINAGE AREA.--334 mi².

PERIOD OF RECORD.--October 1981 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 8,470 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 6 to Jan. 28, and Mar. 1 to Apr. 8. Records good except for estimated daily discharges, which are poor. Diversions for irrigation of hay meadows upstream from station. Transmountain diversion by Tarbell ditch exports water upstream from station to Saguache Creek, since 1913. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--7 years, 61.1 ft³/s; 44,270 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,120 ft³/s, May 21, 1984, gage height, 4.49 ft; minimum daily, 8.4 ft³/s, Feb. 7, 1982.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 107 ft³/s at 2100 June 28, gage height, 1.25 ft; minimum daily, 16 ft³/s, May 14.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41	35	24	25	26	37	[illegible]	[illegible]	47	41	48	[illegible]
2	39	35	24	25	26	34	[illegible]	[illegible]	47	37	37	[illegible]
3	37	33	24	25	27	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
4	37	33	24	25	28	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	46
5	37	34	23	25	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	44
6	37	28	23	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7	36	27	23	25	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
8	36	25	23	25	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	42
9	36	26	23	25	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
10	36	27	22	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
11	34	27	22	[illegible]	[illegible]	37	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
12	34	27	[illegible]	[illegible]	[illegible]	36	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
13	34	27	[illegible]	[illegible]	[illegible]	[illegible]	47	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
14	37	27	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
15	36	27	22	25	31	24	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	43
16	35	27	22	25	31	[illegible]	[illegible]	17	[illegible]	[illegible]	37	40
17	33	27	22	25	31	24	41	19	[illegible]	[illegible]	46	33
18	33	27	22	25	33	24	42	27	[illegible]	[illegible]	45	30
19	32	27	22	25	30	27	48	23	[illegible]	[illegible]	42	33
20	31	27	22	25	31	29	34	30	[illegible]	[illegible]	[illegible]	32
21	31	27	23	25	31	35	42	27	[illegible]	[illegible]	[illegible]	31
22	32	27	23	25	31	42	38	24	[illegible]	26	52	33
23	33	26	23	25	31	41	37	20	45	25	54	34
24	35	25	23	25	30	38	39	18	46	25	51	33
25	36	25	23	25	30	35	36	21	43	26	49	32
26	35	25	23	25	30	37	37	27	42	[illegible]	40	36
27	35	25	24	25	30	41	36	24	41	[illegible]	56	33
28	34	25	25	25	[illegible]	39	35	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
29	38	25	25	26	30	37	34	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
30	37	24	25	25	---	34	34	28	[illegible]	[illegible]	[illegible]	[illegible]
31	34	---	25	25	---	31	---	29	---	[illegible]	[illegible]	---
TOTAL	1090	825	715	776	831	973	1167	778	[illegible]	[illegible]	[illegible]	1153
MEAN	35.2	27.5	23.1	25.0	28.7	31.4	38.9	25.1	[illegible]	[illegible]	[illegible]	38.4
MAX	41	35	25	26	36	42	49	32	98	[illegible]	[illegible]	[illegible]
MIN	31	24	22	25	24	24	30	16	[illegible]	[illegible]	37	29
AC-FT	2160	1640	1420	1540	1650	1930	2310	1540	[illegible]	[illegible]	[illegible]	2290

CAL YR 1987 TOTAL 24073 MEAN 66.0 MAX 270 MIN 20 AC-FT 47750
WTR YR 1988 TOTAL 11910 MEAN 32.5 MAX 98 MIN 16 AC-FT 23620

09119000 TOMICHI CREEK AT GUNNISON, CO

LOCATION.--Lat 38°31'18", long 106°56'25", in NE¼SW¼ sec.11, T.49 N., R.1 W., Gunnison County, Hydrologic Unit 14020003, on right bank 300 ft downstream from highway bridge, 1.8 mi southwest of Post Office in Gunnison, and 2.0 mi upstream from mouth.

DRAINAGE AREA.--1,061 mi².

PERIOD OF RECORD.--November and December 1910 (gage heights and discharge measurements only), October 1937 to current year. Monthly discharges only for some periods, published in WSP 1313. Published as "near Gunnison" 1910.

REVISED RECORDS.--WSP 2124: Drainage area. WDR CO-86-2: 1985.

GAGE.--Water-stage recorder. Datum of gage is 7,628.58 ft above National Geodetic Vertical Datum of 1929. Nov. 25 to Dec. 24, 1910, nonrecording gage 300 ft upstream at different datum. Apr. 20, 1938, to Oct. 2, 1940, water-stage recorder at present site at datum 1.00 ft, higher

REMARKS.--Estimated daily discharges: Nov. 16 to Apr. 10 and May 10-17. Records good except for estimated daily discharges, which are poor. Diversions for irrigation of about 14,300 acres upstream from station. Water diverted upstream from station by Larkspur ditch to Arkansas River basin since 1935 and by Tarbell ditch to Rio Grande basin since 1914. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--51 years (water years 1938-88), 177 ft³/s; 128,200 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,620 ft³/s, May 23, 1984, gage height, 5.49 ft; minimum daily, 7.5 ft³/s, Sept. 30, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 319 ft³/s at 1300 June 12, gage height, 2.24 ft; minimum daily, 42 ft³/s, May 14.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	79	130	120	100	83	143	[illegible]	[illegible]	177	176	227	114
2	79	127	120	100	80	130	150	116	163	152	209	114
3	77	129	120	100	78	120	155	99	168	142	170	112
4	76	127	120	100	72	117	170	[illegible]	[illegible]	130	151	104
5	73	127	120	98	88	116	180	72	216	122	138	97
6	72	128	119	98	86	135	193	79	262	127	140	85
7	73	135	115	98	83	125	210	78	291	116	157	80
8	74	132	115	98	92	104	230	73	265	97	157	71
9	75	127	115	98	86	110	210	67	239	101	146	67
10	72	129	115	96	80	120	200	64	224	97	132	69
11	71	125	115	96	80	110	193	58	254	108	120	86
12	71	133	115	96	82	100	200	53	304	104	108	90
13	76	127	115	96	82	98	230	48	278	93	111	96
14	84	139	115	94	82	96	260	42	258	87	105	104
15	93	144	114	94	80	95	270	46	228	84	90	96
16	97	137	113	94	82	96	260	43	202	87	94	91
17	96	129	112	94	82	96	230	69	183	95	135	88
18	98	110	111	94	82	95	220	88	169	115	136	86
19	99	119	110	92	82	100	210	139	167	127	127	78
20	131	133	110	92	82	110	197	215	166	117	118	75
21	101	139	110	92	84	145	[illegible]	[illegible]	[illegible]	97	127	75
22	93	138	109	90	86	180	192	177	173	89	143	78
23	101	127	108	90	88	170	172	[illegible]	[illegible]	83	142	78
24	109	130	107	90	90	160	166	127	179	80	129	77
25	114	125	106	90	94	150	159	113	[illegible]	83	120	74
26	113	125	105	88	100	140	146	112	166	90	116	73
27	116	123	104	86	110	190	142	123	166	107	124	71
28	114	122	103	84	115	180	135	136	167	111	137	70
29	112	121	102	82	120	170	130	154	201	120	127	68
30	121	120	100	82	---	160	132	167	228	141	118	69
31	120	---	100	82	---	150	---	180	---	163	114	---
TOTAL	2860	3790	3462	2884	2531	4011	5679	3287	6135	3433	4168	2536
MEAN	92.3	126	112	93.0	87.3	129	189	106	204	111	134	84.5
MAX	131	144	120	100	120	190	270	215	304	176	227	114
MIN	71	110	100	82	72	96	130	42	153	80	90	67
AC-FT	5670	7520	6870	5720	5020	7960	11260	6520	12170	6810	8270	5030

CAL YR 1987 TOTAL 93139 MEAN 255 MAX 1420 MIN 71 AC-FT 184700
WTR YR 1988 TOTAL 44776 MEAN 122 MAX 304 MIN 42 AC-FT 88810

09124500 LAKE FORK AT GATEVIEW, CO

LOCATION.--Lat 38°17'56", long 107°13'46", in SE¼NE¼ sec.29, T.47 N., R.3 W., Gunnison County, Hydrologic Unit 14020002, on left bank at old village of Gateview, 25 ft downstream from private bridge, 0.2 mi upstream from Indian Creek, and 6.3 mi upstream from waterline of Blue Mesa Reservoir, at elevation 7,519 ft.

DRAINAGE AREA.--334 mi².

PERIOD OF RECORD.--October 1937 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 7,827.66 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1938, at datum 2.00 ft, higher, and Oct. 1, 1938, to Sept. 30, 1945, at datum 1.00 ft, higher.

REMARKS.--Estimated daily discharges: Nov. 19 to Apr. 6. Records fair except for estimated daily discharges, which are poor. Diversions for irrigation of about 1,600 acres upstream from station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--51 years, 241 ft³/s, 174,600 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,720 ft³/s, July 10, 1983, gage height, 4.18 ft; minimum daily, 22 ft³/s, Jan. 21, 1976.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,400 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)
June 5	0300	*1,360	*2.82

Minimum daily, 36 ft³/s, Feb. 4.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	72	60	52	50	43	68	62	133	419	624	170	152
2	72	68	52	50	43	66	59	132	363	562	171	154
3	73	66	52	50	42	64	68	121	492	526	163	145
4	71	63	52	50	36	69	62	117	905	513	152	138
5	70	60	52	50	45	62	64	116	1220	456	144	133
6	68	76	52	50	45	62	66	127	1140	456	188	129
7	65	75	52	50	44	60	73	119	1120	435	224	124
8	62	67	52	49	46	60	80	116	1070	397	224	118
9	65	60	52	49	44	58	75	115	1030	369	211	113
10	65	57	52	49	41	58	67	111	1030	344	187	114
11	63	58	52	49	42	56	71	126	981	323	172	124
12	63	52	52	49	42	56	76	161	912	293	157	127
13	63	57	52	48	42	54	89	247	840	277	152	148
14	69	64	52	48	42	54	94	357	639	266	141	144
15	70	64	52	48	42	52	95	461	674	262	136	140
16	66	54	52	48	42	52	99	551	630	249	137	135
17	62	49	52	48	42	52	103	575	706	233	149	131
18	61	45	52	48	42	52	101	588	672	219	153	128
19	61	49	52	48	42	54	99	541	688	207	152	125
20	57	56	52	48	42	58	102	444	697	194	143	124
21	55	60	51	48	42	63	113	341	796	185	143	124
22	61	56	50	48	42	78	113	281	750	172	156	123
23	61	56	50	48	43	74	108	258	781	159	148	131
24	60	50	50	48	44	72	102	291	800	153	141	131
25	67	54	50	48	45	70	98	402	773	155	136	129
26	66	52	50	48	47	74	93	419	730	148	133	125
27	63	50	50	48	54	80	90	493	663	149	171	123
28	61	46	50	47	58	74	89	616	670	157	182	121
29	61	54	50	46	66	68	95	694	708	177	167	117
30	64	52	50	44	---	64	108	645	695	164	156	113
31	61	---	50	43	---	62	---	510	---	165	154	---
TOTAL	1998	1730	1591	1495	1290	1946	2614	10208	23607	9024	5016	3889
MEAN	64.5	57.7	51.3	48.2	44.5	62.8	87.1	329	787	291	162	130
MAX	73	76	52	50	66	80	113	694	1220	624	224	154
MIN	55	45	50	43	36	52	59	111	363	148	133	113
AC-FT	3960	3430	3160	2970	2560	3860	5180	20250	46820	17900	9950	7710

CAL YR 1987 TOTAL 101034 MEAN 277 MAX 1700 MIN 45 AC-FT 200400
WTR YR 1988 TOTAL 64408 MEAN 176 MAX 1220 MIN 36 AC-FT 127800

09125800 SILVER JACK RESERVOIR NEAR CIMARRON, CO

LOCATION.--Lat 38°13'58", long 107°32'28", in T.46 N., R. 6 W., Gunnison County, Hydrologic Unit 14020002, in gate house of Silver Jack Dam on Cimarron River, 14.5 mi south of Cimarron, Co.

DRAINAGE AREA.--59 mi²

PERIOD OF RECORD.--October 1971 to September 1988.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation); gage readings have been reduced to elevations above National Geodetic Vertical Datum of 1929.

REMARKS.--Reservoir is formed by an earthfill dam. Storage began in Deceneber 1970; dam completed December 1971. Capacity, 13,520 acre-ft, 1971 survey, between elevation 8,800.0 ft, streambed at dam, and 8,925.6 ft, crest of spillway. Dead storage below elevation 8,816.9, 520 acre-ft. Figures given are live contents.

COOPERATION.--Capacity tables provided by U.S. Bureau of Reclamation.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 13,400 acre-ft, June 7; elevation, 8,926.95 ft; minimum contents, 2,470 acre-ft, Mar. 20, 21, elevation, 8,871.35 ft.

MONTHEND ELEVATION IN FEET NGVD AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

Date	Elevation	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.	*8,885.00	4,250	--
Oct. 31.	8,877.50	3,220	-1,030
Nov. 30.	8,875.97	3,040	-180
Dec. 31.	8,875.10	2,930	-110
CAL YR 1987	-	-	--
Jan. 31.	8,873.68	2,760	-170
Feb. 29.	8,872.34	2,570	-190
Mar. 31.	8,872.10	2,580	+10
Apr. 30.	8,884.40	4,170	+1,590
May 31.	8,919.23	11,250	+7,080
June 30.	8,926.13	13,150	+1,900
July 31.	8,915.71	10,320	-2,830
Aug. 31.	8,897.05	6,390	-3,930
Sept. 30.	8,888.50	4,820	-1,570
WTR YR 1988	-	-	+570

*Estimated by interpolation from 0800 readings.

09126000 CIMARRON RIVER NEAR CIMARRON, CO

LOCATION.--Lat 38°15'36", long 107°32'43", in NW¼NE¼ sec.8, T.46 N., R.6 W., Gunnison County, Hydrologic Unit 14020002, on right bank 100 ft upstream from Forest Service bridge, 0.6 mi upstream from headgate on Cimarron ditch, 2.1 mi downstream from Silver Jack Dam, and 13 mi south of Cimarron.

DRAINAGE AREA.--66.6 mi².

PERIOD OF RECORD.--October 1954 to current year. Prior to October 1965, published as Cimarron Creek near Cimarron.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 8,631.48 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 12, 1972, at site 0.2 mi downstream at different datum.

REMARKS.--Estimated daily discharges: Nov. 18 to Apr. 6. Records good except for estimated daily discharges, which are poor. Diversion upstream from station through Owl Creek ditch into Uncompahgre River basin. Flow regulated by Silver Jack Dam, 2.1 mi upstream since Dec. 23, 1970, total capacity, 13,520 acre-ft. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--16 years (water years 1955-70), 88.6 ft³/s; 64,190 acre-ft/yr, prior to completion of Silver Jack Dam: 18 years (water years 1971-88), 99.4 ft³/s; 72,020 acre-ft/yr, subsequent to completion of Silver Jack Dam.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,790 ft³/s, June 28, 1957, gage height, 8.32 ft, site and datum then in use; no flow Dec. 24, 1970, to Jan. 9, 1971 (result of storage in Silver Jack Dam); minimum daily prior to construction of Silver Jack Dam, 8.0 ft³/s, Dec. 27-28, 1962, Jan. 13, 1963; minimum daily, 4.4 ft³/s, Apr. 20-21, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 600 ft³/s at 2230 June 6, gage height, 4.50 ft, minimum daily, 9.0 ft³/s, Dec. 2.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	29	10	17	19	16	22	28	99	193	109	95
2	32	29	9.0	16	19	16	22	26	110	176	107	95
3	32	27	12	16	19	16	22	26	118	157	107	94
4	32	26	16	17	18	16	22	27	120	158	107	93
5	31	26	19	18	16	16	24	28	226	162	106	91
6	31	27	20	20	14	15	24	27	519	152	106	87
7	31	26	20	20	14	15	25	26	527	134	106	86
8	29	26	20	20	14	15	24	26	499	118	92	86
9	29	26	19	20	14	15	24	26	494	111	82	85
10	29	27	19	20	15	15	23	26	483	113	82	88
11	29	27	19	18	15	15	24	25	448	114	82	86
12	41	25	19	18	16	15	26	40	416	113	82	79
13	52	24	18	17	16	15	27	59	365	113	80	72
14	53	24	16	17	17	15	27	58	270	105	80	71
15	45	23	13	18	17	15	31	58	273	98	80	70
16	36	23	12	18	17	16	28	59	245	98	81	69
17	36	22	11	18	18	16	26	62	276	98	81	69
18	36	20	12	19	18	16	26	64	256	103	81	68
19	34	19	15	19	17	16	26	66	267	106	82	33
20	34	18	19	19	17	16	27	70	323	106	82	18
21	36	18	20	19	16	18	26	67	341	107	82	18
22	33	18	20	20	16	18	25	65	331	108	90	18
23	30	18	20	20	16	18	24	74	332	108	94	18
24	30	18	21	20	16	18	23	81	332	109	94	18
25	36	18	21	20	16	18	23	81	293	109	98	18
26	31	18	21	21	16	20	23	92	281	112	101	19
27	30	18	21	21	16	20	25	97	238	110	102	19
28	29	17	21	21	16	20	25	97	244	110	100	19
29	29	15	20	20	16	20	27	98	230	110	97	19
30	29	12	20	20	---	20	29	99	215	111	95	19
31	29	---	18	20	---	20	---	100	---	110	95	---
TOTAL	1045	664	541.0	587	474	520	750	1778	9171	3736	2863	1720
MEAN	33.7	22.1	17.5	18.9	16.3	16.8	25.0	57.4	306	121	92.4	57.3
MAX	53	29	21	21	19	20	31	100	527	193	109	95
MIN	29	12	9.0	16	14	15	22	25	99	98	80	18
AC-FT	2070	1320	1070	1160	940	1030	1490	3530	18190	7410	5680	3410

CAL YR 1987 TOTAL 38266.0 MEAN 105 MAX 667 MIN 9.0 AC-FT 75900
WTR YR 1988 TOTAL 23849.0 MEAN 65.2 MAX 527 MIN 9.0 AC-FT 47300

09128000 GUNNISON RIVER BELOW GUNNISON TUNNEL, CO

LOCATION.--Lat 38°31'45", long 107°38'54", in NE¼NW¼ sec.10, T.49 N., R.7 W., Montrose County, Hydrologic Unit 14020002, on left bank 0.4 mi downstream from east portal of Gunnison tunnel, 4.7 mi downstream from Crystal Creek, and 12 mi northeast of Montrose.

DRAINAGE AREA.--3,965 mi².

PERIOD OF RECORD.--October 1903 to current year. Monthly discharge only for some periods, published in WSP 1313. Published as "at east portal of Gunnison tunnel" 1905-6 and as "at River portal" 1907-11.

REVISED RECORDS.--WSP 1313: 1906(M). WSP 1733: 1918-19, 1948. WSP 2124: Drainage area. WDR CO-77-2: 1926, 1941.

GAGE.--Water-stage recorder. Datum of gage is 6,526.06 ft above National Geodetic Vertical Datum of 1929. Apr. 9, 1905, to Aug. 20, 1915, nonrecording gage at site 300 ft upstream from diversion dam at east portal of Gunnison tunnel, at different datum. Aug. 21, 1915, to Jan. 19, 1943, nonrecording gage at site 500 ft downstream from diversion dam at east portal of Gunnison tunnel, at different datum. Jan. 20, 1943, to Sept. 30, 1956, water-stage recorder at present site at datum 1.0 ft, higher.

REMARKS.--Estimated daily discharges: Oct. 1-7. Records good. Natural flow of stream affected by transmountain diversions, transbasin diversion through Gunnison tunnel for irrigation of about 75,000 acres in Uncompahgre Valley (see table below for figures of diversion), Taylor Park Reservoir (station 09108500), Blue Mesa Reservoir (station 09124600), Morrow Point Reservoir (station 09125400), Crystal Reservoir (station 09127600), diversions for irrigation of about 63,000 acres, and return flow from irrigated areas. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

COOPERATION.--Diversions, in acre-feet, through Gunnison tunnel; provided by Uncompahgre Valley Water Users Association.

AVERAGE DISCHARGE.--85 years, 1,396 ft³/s; 1,011,000 acre-ft/yr, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 19,000 ft³/s, June 15, 1921, gage height, about 15.8 ft, present datum, from rating curve extended above 14,000 ft³/s; no flow Sept. 25-26, 1936, Oct. 8, 1949, Sept. 5-6, 15-16, 1950.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,920 ft³/s at 1500 Jan. 22, gage height, 4.57 ft; minimum daily, 336 ft³/s, May 13.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	870	1370	1510	1580	1570	1400	1540	430	359	360	346	599
2	870	1490	1530	1570	1580	1520	1550	514	361	350	341	578
3	910	1430	1520	1560	1580	1760	1540	577	354	347	345	581
4	960	1510	1520	1560	1560	1760	1510	587	346	344	343	584
5	960	1520	1530	1570	1570	1760	938	639	349	346	344	588
6	960	1510	1520	1580	1570	1760	847	563	352	347	345	585
7	960	1510	1560	1580	1570	1750	855	519	348	346	346	582
8	964	1520	1590	1570	1570	1750	854	406	340	344	352	586
9	960	1520	1600	1540	1570	1740	846	349	349	348	340	453
10	950	1510	1580	1540	1570	1740	859	345	345	348	345	344
11	944	1510	1590	1590	1570	1580	1210	349	349	353	349	348
12	938	1500	1590	1570	1560	1150	696	379	346	358	363	374
13	938	1500	1590	1570	1530	1560	529	336	347	356	355	477
14	937	1510	1590	1570	1530	1720	533	339	356	349	349	505
15	940	1510	1590	1580	1550	1700	689	347	355	349	413	537
16	936	1500	1570	1630	1570	1720	683	347	362	359	526	523
17	928	1510	1590	1730	1570	1740	671	345	346	360	531	544
18	925	1510	1570	1740	1580	1510	586	343	355	362	535	553
19	923	1510	1530	1360	1580	1470	475	345	354	354	447	582
20	936	1510	1550	529	1600	1470	466	340	355	361	372	598
21	922	1510	1560	855	1730	1480	448	351	354	361	383	640
22	912	1510	1570	1890	1710	1470	572	363	350	357	378	662
23	916	1510	1570	1750	1610	1470	629	356	354	360	390	653
24	904	1510	1560	1670	1720	1470	638	350	357	362	387	654
25	918	1500	1560	1730	1720	1480	629	354	359	366	395	662
26	966	1510	1570	1640	1720	1630	609	350	360	371	397	664
27	1110	1510	1570	1570	1740	1740	604	355	359	364	422	702
28	1150	1510	1570	1560	1730	1690	581	361	361	363	444	722
29	1240	1510	1570	1560	1720	1580	579	352	360	356	443	714
30	1300	1510	1570	1580	---	1540	570	359	359	349	439	627
31	1280	---	1570	1580	---	1510	---	353	---	342	494	---
TOTAL	30327	45050	48460	47904	46750	49620	23836	12303	10601	10992	12259	17221
MEAN	978	1502	1563	1545	1612	1601	795	397	353	355	395	574
MAX	1300	1520	1600	1890	1740	1760	1550	639	362	371	535	722
MIN	870	1370	1510	529	1530	1150	448	336	340	342	340	344
AC-FT	60150	89360	96120	95020	92730	98420	47280	24400	21030	21800	24320	34160
a	41500	0	0	0	0	0	43200	65600	63900	68900	70700	45300

CAL YR 1987 TOTAL 524303 MEAN 1436 MAX 2500 MIN 568 AC-FT 1040000
WTR YR 1988 TOTAL 355323 MEAN 971 MAX 1890 MIN 336 AC-FT 704800

a-Diversions, in acre-feet, through Gunnison Tunnel, provided by Uncompahgre Valley Water Users Association.

09128500 SMITH FORK NEAR CRAWFORD, CO

LOCATION.--Lat 38°43'40", long 107°30'22", in SW¼SE¼ sec.24, T.15 S., R.91 W., Delta County, Hydrologic Unit 14020002, on left bank 20 ft upstream from Forest Service bridge, 3.4 mi upstream from Second Creek, 6 mi northeast of Crawford, and 6.5 mi upstream from Iron Creek.

DRAINAGE AREA.--42.8 mi².

PERIOD OF RECORD.--October 1935 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 1313: 1941. WDR CO 83-2: Drainage area. WDR CO 85-2: 1984, 1984 (M).

GAGE.--Water-stage recorder. Elevation of gage is 7,091 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Nov. 16, 1918, nonrecording gage at present site and datum.

REMARKS.--Estimated daily discharges: Oct. 17 [illegible], 25, Nov. 28 to Dec. 10, 12, Dec. 13 to Jan. 15, Jan. 19-22, Feb. 3-27, 29, Mar. 2 to Apr. 7, and Apr. [illegible]-15. Records good except for estimated daily discharges, which are poor. Diversions for irrigation of a few small hay meadows upstream from station. Saddle Mountain ditch diverts water upstream from station for irrigation of about 800 acres downstream. One small ditch diverts water from Virginia Creek to Iron Creek drainage. Head and Ferrier ditch imports water from Curecanti Creek drainage. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--53 years, 42.6 ft³/s; 30,860 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,410 ft³/s, May 15, 1984, gage height, 8.28 ft, but may have been higher during period of indefinite stage-discharge relationship, May 16-21, 1984; minimum daily discharge, 1.8 ft³/s, July 30-31, Aug. 1, 1963, Sept. 5-6, 1978.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 260 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
May 15	0200	*187	*2.71				

Minimum daily, 2.5 ft³/s, Aug. 7.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.6	12	9.0	8.2	7.7	14	17	105	79	30	7.5	8.1
2	4.9	14	8.8	7.8	7.7	14	19	99	71	29	6.1	7.7
3	7.7	14	9.4	6.8	7.7	14	20	92	75	31	4.9	7.4
4	8.4	13	9.0	7.2	7.0	12	22	90	94	32	4.0	7.0
5	8.8	12	8.6	7.8	7.2	10	24	93	109	31	3.1	7.4
6	8.8	15	8.8	8.0	8.2	11	32	102	112	28	2.7	7.0
7	8.4	15	8.2	8.2	8.4	12	42	97	105	24	2.5	7.0
8	9.2	13	8.2	8.2	9.2	9.5	52	92	94	21	3.1	5.9
9	9.7	13	8.2	8.2	8.4	12	52	85	85	19	4.1	5.4
10	9.7	13	8.2	8.0	9.0	11	62	88	82	17	4.2	7.3
11	9.7	13	7.7	7.8	8.8	9.0	64	98	80	15	3.8	12
12	9.7	12	7.6	8.0	8.6	9.5	70	111	72	13	4.6	17
13	12	12	7.0	7.4	8.8	8.5	78	138	67	12	4.4	17
14	13	12	6.4	6.4	8.8	10	82	161	63	11	3.8	16
15	13	12	6.2	7.4	8.6	9.5	86	171	63	10	4.1	14
16	12	11	5.8	8.5	9.2	9.0	90	165	65	9.5	5.7	13
17	11	11	6.4	8.1	8.6	8.5	83	160	63	9.0	5.6	12
18	9.7	10	7.8	7.7	7.8	9.0	73	160	59	9.4	4.9	11
19	11	11	7.8	7.4	8.8	9.5	69	155	56	12	4.1	12
20	10	13	8.2	5.6	10	10	69	131	54	21	3.8	12
21	8.8	13	7.8	7.6	9.6	13	73	104	51	21	4.6	12
22	9.3	11	7.2	8.2	11	17	73	89	46	20	7.3	12
23	9.7	10	8.2	8.8	12	17	69	84	43	18	8.1	12
24	11	10	8.8	8.8	13	18	68	90	41	18	7.7	12
25	16	9.4	8.4	9.3	14	16	66	97	38	18	7.4	9.3
26	13	9.8	8.0	9.3	14	18	64	101	34	16	7.0	9.3
27	12	11	7.8	9.3	13	23	64	106	32	16	8.8	9.7
28	11	10	8.2	8.8	12	28	67	108	35	16	8.3	10
29	11	9.4	8.4	8.4	13	22	74	117	36	15	8.1	10
30	12	9.4	8.2	8.4	---	22	89	117	34	14	7.7	10
31	12	---	8.6	7.7	---	20	---	94	---	7.9	8.1	---
TOTAL	316.1	354.0	246.9	247.3	280.1	426.0	1813	3500	1938	562.8	170.3	312.5
MEAN	10.2	11.8	7.96	7.98	9.66	13.7	60.4	113	64.6	18.2	5.49	10.4
MAX	16	15	9.4	9.3	14	28	90	171	112	32	8.8	17
MIN	3.6	9.4	5.8	5.6	7.0	8.5	17	84	32	7.9	2.5	5.4
AC-FT	627	702	490	491	556	845	3600	6940	3840	1120	338	620

CAL YR 1987 TOTAL 17446.9 MEAN 47.8 MAX 351 MIN 1.7 AC-FT 34610
WTR YR 1988 TOTAL 10167.0 MEAN 27.8 MAX 171 MIN 2.5 AC-FT 20170

09131495 PAONIA RESERVOIR NEAR BARDINE, CO

LOCATION.--Lat 38°56'39", long 107°21'06", in NE¼ sec.8, T.13 S., R.89 W., Gunnison County, Hydrologic Unit 14020004, in gate house of Paonia Dam on Muddy Creek, 16 mi east of Paonia.

DRAINAGE AREA.--246 mi²

PERIOD OF RECORD.--December 1961 to current year. Monthend active contents provided by U.S. Bureau of Reclamation from December 1961 to September 1987.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation); gage readings have been reduced to elevations above National Geodetic Vertical Datum of 1929.

REMARKS.--Reservoir is formed by an earthfill dam. Storage began in December 1961; dam completed January 1962. Capacity 20,950 acre-ft, 1966 survey, between elevation 6,290.0 ft streambed at dam, and 6,447.5 ft, crest of spillway. Dead storage below elevation 6,358.0 ft, 2,440 acre-ft. Inactive storage below elevation 6,360.0 ft, 2,620 acre-ft. Figures published prior to 1968 water year are active contents; figures given beginning 1988 water year are live contents.

COOPERATION.--Capacity tables provided by U.S. Bureau of Reclamation.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 18,900 acre-ft, July 7, elevation, 6,448.92 ft; minimum contents, 2,590 acre-ft, Sept. 10-12, elevation, 6,380.71 ft.

MONTHEND ELEVATION IN FEET NGVD AND CONTENTS, AT 2400 WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

Date	Elevation	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.	6,368.91	1,070	--
Oct. 31.	6,385.39	3,230	+2,160
Nov. 30.	6,392.67	4,400	+1,170
Dec. 31.	6,397.75	5,300	+900
CAL YR 1987	-	-	-1,970
Jan. 31.	6,401.60	6,050	+750
Feb. 29.	6,404.25	6,600	+550
Mar. 31.	6,389.60	3,890	-2,710
Apr. 30.	6,386.43	3,390	-500
May 31.	6,447.40	18,480	+15,090
June 30.	6,447.91	18,610	+110
July 31.	6,434.20	14,300	-4,310
Aug. 31.	6,395.61	4,910	-9,390
Sept. 30.	6,386.92	3,460	-1,450
WTR YR 1988	-	-	+2,390

09132500 NORTH FORK GUNNISON RIVER NEAR SOMERSET, CO

LOCATION.--Lat 38°55'33", long 107°26'01", in SE¼SW¼ sec.10, T.13 S., R.90 W., Gunnison County, Hydrologic Unit 14020004, on left bank 2.3 mi east of Somerset and 4.8 mi upstream from Hubbard Creek.

DRAINAGE AREA.--526 mi².

PERIOD OF RECORD.--October 1933 to current year. Monthly discharge only for some periods, published in WSP 1313. Water-quality data available, October 1977 to September 1982. Sediment data available, November 1978 to September 1982.

REVISED RECORDS.--WSP 2124: Drainage area. WDR CO-77-2: 1976.

GAGE.--Water-stage recorder. Elevation of gage is 6,280 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Oct. 1,1982, at various sites 0.8 mi downstream, at different datums. See WDR CO-81-2, for history of changes.

REMARKS.--Estimated daily discharges: Dec. 14 to Mar. 14. Records good except for estimated daily discharges, which are fair. Natural flow of stream affected by small diversions for irrigation in nearby drainage areas, irrigation of about 3,000 acres upstream from station, storage in Overland Reservoir, capacity, 6,280 acre-ft, and storage in Paonia Reservoir, capacity, 18,300 acre-ft, since February 1962.

AVERAGE DISCHARGE.--55 years, 461 ft³/s; 334,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,220 ft³/s, May 24, 1984, gage height, 8.20 ft, from outside high-water mark; minimum daily, 17 ft³/s, Nov. 13, 1950.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,690 ft³/s at 0130 June 6, gage height, 4.48 ft; minimum daily, 49 ft³/s, Dec. 15.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	72	89	89	64	81	82	329	1100	870	468	252	224
2	72	100	117	56	80	84	274	887	852	397	249	224
3	72	101	97	64	81	84	278	731	1000	348	246	224
4	72	94	83	72	77	81	268	741	1290	312	239	224
5	70	91	79	74	74	78	253	834	1510	295	236	224
6	70	105	74	78	78	82	275	949	1560	283	232	224
7	70	111	69	75	80	86	391	931	1470	270	233	80
8	70	103	65	75	84	82	546	861	1370	254	236	72
9	71	98	73	76	78	86	561	780	1290	231	236	73
10	70	89	72	74	82	84	510	625	1300	212	236	68
11	69	88	66	78	80	78	523	635	1240	214	237	89
12	69	86	65	72	78	80	614	876	1160	229	232	132
13	72	83	58	64	80	94	749	1110	1000	227	232	172
14	78	86	51	74	83	92	932	1270	811	221	232	131
15	81	86	49	78	78	90	949	1420	791	219	232	113
16	79	76	57	87	82	86	947	1430	793	213	232	112
17	75	78	64	80	76	81	891	1450	782	214	229	105
18	72	60	62	84	72	77	750	1520	756	216	228	101
19	72	96	65	80	80	81	712	1390	812	216	223	103
20	72	105	62	70	82	85	723	1100	796	216	224	97
21	71	112	57	82	80	96	778	914	761	216	224	98
22	71	103	65	80	84	119	745	824	692	216	236	98
23	72	81	68	84	86	144	675	764	626	216	236	94
24	74	77	65	84	82	156	733	827	621	218	232	92
25	96	72	60	78	76	201	753	973	555	220	232	91
26	91	75	58	86	78	265	712	1070	501	220	229	90
27	83	72	63	84	80	305	696	1130	453	220	230	88
28	80	59	66	88	82	417	753	1080	558	223	228	85
29	80	83	62	90	84	453	802	1180	741	230	224	84
30	91	77	68	92	---	459	982	1210	604	251	224	84
31	95	---	66	86	---	433	---	905	---	249	224	---
TOTAL	2352	2637	2093	2408	2308	4718	19001	31499	27561	7734	7219	3670
MEAN	75.9	87.9	67.5	77.7	79.6	152	633	1016	919	249	233	122
MAX	96	112	117	92	86	459	982	1520	1560	468	252	224
MIN	69	59	49	56	72	77	253	625	453	212	224	68
AC-FT	4670	5230	4150	4780	4580	9360	37690	62480	54670	15340	14320	7280

CAL YR 1987 TOTAL 169772 MEAN 465 MAX 2610 MIN 49 AC-FT 336700
WTR YR 1988 TOTAL 113200 MEAN 309 MAX 1560 MIN 49 AC-FT 224500

09134000 MINNESOTA CREEK NEAR PAONIA, CO

LOCATION.--Lat 38°52'12", long 107°30'13", in SE¼NE¼ of sec.1, T. 14 S., R. 91 W., Delta County, Hydrologic Unit 14020004, on right bank .25 mi downstream from South Fork, 6 mi upstream from mouth, and 4.5 mi east of Paonia.

DRAINAGE AREA.--41.3 mi².

PERIOD OF RECORD.--April 1936 to September 1947, October 1985 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,200 ft above National Geodetic Vertical Datum of 1929, from topographic map. April 1936 to October 1941, staff gages at different datums. October 1941 to September 1947, water-stage recorder at different datum. December 1985 to present, water-stage recorder, datum lowered 2.0 ft.

REMARKS.--Estimated daily discharges: Dec. 14-16, 21, Jan. 1-7, 12-14, 20, Feb. 5, 15, 18, and Mar. 14. Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by two small storage reservoirs, one of which obtains water from the East Muddy Creek Basin. Small trans-basin diversion from Coal Creek into Minnesota Creek. Diversions upstream from station for irrigation of about 100 acres. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--14 years (water years 1936-47, 1986-88), 24.9 ft³/s; 18,040 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 356 ft³/s, July 10, 1936 (gage height, 3.00 ft, site and datum then in use); minimum daily, 2.7 ft³/s, Nov. 18, 1988.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 66 ft³/s at 0500 June 9, gage height, 1.83 ft; minimum daily, 2.7 ft³/s, Nov. 18.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.9	6.0	5.2	3.5	3.2	4.1	4.4	23	30	31	16	11
2	3.5	8.9	4.9	3.4	3.2	4.1	5.1	23	27	29	15	11
3	3.4	6.5	4.8	3.3	3.3	3.8	6.7	21	28	29	16	11
4	3.5	5.9	4.7	3.4	3.2	3.5	7.4	20	34	28	18	10
5	3.3	5.7	5.1	3.5	3.3	3.4	8.0	20	47	28	17	6.8
6	3.3	3.9	5.0	3.5	3.6	3.4	9.1	22	54	27	17	4.0
7	3.3	7.5	4.9	3.4	3.8	3.6	12	20	52	26	17	3.8
8	3.8	6.7	4.5	3.5	3.3	3.3	13	15	52	24	16	3.7
9	3.3	6.3	4.8	3.5	3.2	4.0	12	14	62	23	13	3.6
10	3.3	5.9	4.7	3.6	3.0	3.6	10	15	57	24	13	4.2
11	3.3	5.8	4.7	3.6	3.0	3.2	11	19	52	26	13	7.3
12	3.3	5.5	3.6	3.4	3.0	3.2	12	29	47	25	13	9.6
13	4.4	5.5	3.5	3.6	3.2	3.6	14	39	45	24	13	8.4
14	5.2	5.9	3.7	3.5	3.0	3.2	16	48	40	24	13	6.0
15	5.1	5.5	3.4	3.5	2.9	4.3	22	47	43	23	13	5.2
16	4.7	4.7	3.6	3.5	3.3	3.2	21	49	45	23	16	4.9
17	4.6	4.2	4.5	3.5	3.6	3.0	20	51	46	23	18	4.6
18	4.6	2.7	4.4	3.4	3.2	3.2	17	55	45	23	17	4.2
19	4.9	3.9	4.1	3.2	4.0	3.3	17	57	45	26	16	4.1
20	5.0	4.3	4.2	3.2	3.4	3.4	17	50	44	21	15	4.1
21	4.8	5.5	3.9	3.3	3.6	4.7	20	44	40	21	14	4.8
22	4.6	5.4	4.0	3.5	3.3	5.7	21	40	33	20	17	4.3
23	4.7	5.2	4.0	3.3	3.4	5.8	21	36	29	19	20	4.1
24	5.0	4.8	4.0	3.2	3.6	5.3	19	34	31	19	14	3.9
25	7.3	5.1	3.9	3.3	3.7	5.8	18	34	36	18	14	3.8
26	5.8	5.2	3.8	3.3	3.4	7.2	17	36	35	18	14	3.8
27	5.4	4.9	3.7	3.3	3.3	9.6	17	39	34	17	15	4.0
28	5.3	5.6	3.7	3.3	4.0	8.3	17	40	33	16	13	4.0
29	5.5	5.0	3.7	3.2	3.9	5.4	18	42	34	16	13	4.1
30	6.8	4.9	3.7	3.3	---	5.6	21	43	33	16	12	4.3
31	5.8	---	3.6	3.2	---	5.2	---	35	---	16	12	---
TOTAL	140.7	169.3	130.3	105.3	97.9	139.5	443.7	1060	1233	703	463	168.6
MEAN	4.54	5.64	4.20	3.40	3.38	4.50	14.8	34.2	41.1	22.7	14.9	5.62
MAX	7.3	8.9	5.2	3.6	4.0	9.6	22	57	62	31	20	11
MIN	3.3	2.7	3.4	3.2	2.9	3.0	4.4	14	27	16	12	3.6
AC-FT	279	336	258	209	194	277	880	2100	2450	1390	918	334

CAL YR 1987 TOTAL 9604.0 MEAN 26.3 MAX 151 MIN 2.7 AC-FT 19050
WTR YR 1988 TOTAL 4854.3 MEAN 13.3 MAX 62 MIN 2.7 AC-FT 9630

09135900 LEROUX CREEK AT HOTCHKISS, CO

LOCATION.--Lat 38°47'53", long 107°43'53", in NW¼NE¼ sec.36, T.14 S., R.93 W., Delta County, Hydrologic Unit 14020004, on left bank at upstream side of culvert, 0.3 mi west of Hotchkiss city limits, and 0.5 mi upstream from mouth.

DRAINAGE AREA.--66.7 mi².

PERIOD OF RECORD.--June 1976 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 5,3[illegible] ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Jan. 18, 23-25, 31, Feb. 1-9, 12-13, 16, 21-25, May 11-26, June 13, and July 14 to Aug. 11. Records fair except for estimated daily discharges, which are poor. Natural flow of stream is affected by diversions upstream from station for irrigation and by return flow from irrigated area upstream from station. Mostly return flow after June. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--12 years, [illegible] ft³/s; 25,2[illegible] acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,[illegible] ft³/s, June 7, 1984, gage height, 11.82 ft; minimum daily, 0.55 ft³/s, July 13, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, [illegible] ft³/s at [illegible] Apr. 16, gage height, [illegible] ft; minimum daily, [illegible] ft³/s, May 9-13.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
9	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
12	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
13	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
14	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
15	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
16	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
17	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
18	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
19	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
20	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
21	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
22	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
23	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
24	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
25	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
26	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
27	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
28	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
29	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
30	[illegible]	---	[illegible]	[illegible]	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
31	[illegible]	---	[illegible]	[illegible]	---	[illegible]	---	[illegible]	---	[illegible]	[illegible]	---
TOTAL	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MEAN	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MAX	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MIN	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
AC-FT	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

CAL YR [illegible] TOTAL [illegible] MEAN [illegible] MAX [illegible] MIN [illegible] AC-FT [illegible]
WTR YR [illegible] TOTAL [illegible] MEAN [illegible] MAX [illegible] MIN [illegible] AC-FT [illegible]

09143000 SURFACE CREEK NEAR CEDAREDGE, CO

LOCATION.--Lat 38°59'05", long 107°51'13", in NW¼NW¼ sec.25, T.12 S., R.94 W., Delta County, Hydrologic Unit 14020005, on left bank 5 ft downstream from private bridge, 1.4 mi downstream from Caesar Creek, and 7.0 mi northeast of Cedaredge.

DRAINAGE AREA.--27.4 mi².

PERIOD OF RECORD.--July 1939 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WDR CO-83-2: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is [illegible] ft above National Geodetic Vertical Datum of [illegible], from topographic map.

REMARKS.--Estimated daily discharges: [illegible]. Records good except for estimated daily discharges, which are poor. Flow regulated by many small reservoirs. [illegible] and water temperature were obtained and are published elsewhere in this report.

[illegible]

[illegible]

[illegible]

0914[illegible] SURFACE CREEK AT CEDAREDGE, [illegible]

LOCATION.--Lat 38°[illegible], long 1[illegible], in [illegible] sec. [illegible], T. [illegible] S., R. [illegible] W., Delta County, Hydrologic Unit 14[illegible], on left bank at Cedaredge, [illegible] ft east of State Highway [illegible], and [illegible] mi upstream from mouth.

DRAINAGE AREA.--[illegible] mi².

PERIOD OF RECORD.--October 1[illegible] to current year. Monthly discharge only for some periods, [illegible] 19[illegible].

REVISED RECORDS.--[illegible] drainage area.

GAGE.--Water-stage recorder and concrete control. [illegible]

REMARKS.--[illegible]

[illegible]

09144250 GUNNISON RIVER AT DELTA, CO

LOCATION.--Lat [illegible], long 108°04'36", in SE¼NE¼ sec.11, T.15 S., R.96 W., Delta County, Hydrologic Unit 14020005, on left bank near upstream side of U.S. Highway 50 bridge at north edge of Delta.

DRAINAGE AREA.--[illegible] mi².

PERIOD OF RECORD.--[illegible] 1976 to current year. Gage-height records collected at this site 1917-77 (flood seasons only) are in [illegible] of the National Weather Service.

GAGE.--Water-stage [illegible]. Datum of gage is [illegible] ft, National Weather Service Datum (levels by National Weather Service). Prior to May 1976 nonrecording gage at present site and datum.

REMARKS.--[illegible]. Natural flow of stream affected by [illegible] power developments, and many diversions for irrigation. [illegible] water temperature were obtained and are published [illegible] this report.

[illegible]

[illegible]

[illegible]

[illegible]

09146200 UNCOMPAHGRE RIVER NEAR RIDGWAY, [illegible]

LOCATION.--Lat 38°11'02", long 107°44'43", in SW¼NE¼ sec.4, T.45 N., R.8 W., Ouray County, Hydrologic Unit 14020006, on right bank 15 ft downstream from bridge, [illegible] mi downstream from Dry Creek, [illegible] upstream from Dallas Creek, and 2.3 mi north of Ridgway.

DRAINAGE AREA.--149 mi².

PERIOD OF RECORD.--October 1958 to current year.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is [illegible] ft above [illegible] (levels by U.S. Bureau of Reclamation).

REMARKS.--Estimated daily discharges: [illegible] Apr. [illegible]. Records good except for estimated daily discharges, which are [illegible] upstream from station. Water is imported upstream from station [illegible] Mineral Creek in San Juan River basin. [illegible] were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--[illegible] years, [illegible] ft³/s, [illegible] acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--[illegible]

EXTREMES FOR CURRENT YEAR.--[illegible]

[illegible]

CAL YR [illegible] TOTAL [illegible] MEAN [illegible] MAX [illegible] MIN [illegible] AC-FT [illegible]
WTR YR [illegible] TOTAL [illegible] MEAN [illegible] MAX [illegible] MIN [illegible] AC-FT [illegible]

09147000 DALLAS CREEK NEAR RIDGWAY, CO

LOCATION.--Lat 38°10'40", long 107°45'28", on line between sec.4 and 5, T.4 5 N., R.8 W., Ouray County, Hydrologic Unit 14020006, on right bank 25 ft downstream from county bridge, 1.5 mi upstream from mouth, and 1.5 mi northwest of Ridgway.

DRAINAGE AREA.--97.2 mi² (revised).

PERIOD OF RECORD.--March 1922 to October 1927, October 1955 to September 1971, October 1971 to current year.

REVISED RECORDS.--WSP 1924: 1960.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 6,980 ft above National Geodetic Vertical Datum of 1929, from topographic map. Mar. 1, 1922 to Oct. 31, 1927, nonrecording gage at different datum.

REMARKS.--Estimated daily discharges: Nov. 18-21, [illegible], Nov. 28 to Dec. 2, Dec. 9, 13-18, 21, 22, Dec. 24 to [illegible], Feb. 4-26, 13-27, and Mar. 12-1[illegible]. Records good except for estimated daily discharges, which are [illegible]. Diversions upstream from station for irrigation of about [illegible] acres upstream from and 700 acres downstream from station. One small ditch imports water from Leopard Creek (Dolores River basin) to drainage [illegible] station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--[illegible] years, [illegible] ft³/s; [illegible] acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, [illegible] ft³/s, [illegible], gage height, 4.40 ft, [illegible] above [illegible] ft³/s; maximum gage height, 5.11 ft, July 21, 1964; [illegible] daily discharge, [illegible] ft³/s, June [illegible], 1977.

EXTREMES FOR CURRENT YEAR.--[illegible] ft³/s at [illegible], gage height, [illegible] ft, maximum gage height, [illegible]; minimum daily discharge, [illegible] ft³/s, June [illegible].

DISCHARGE, [illegible] MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
9	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
12	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
13	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
14	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
15	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
16	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
17	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
18	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
19	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
20	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
21	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	47	[illegible]
22	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.8	[illegible]	[illegible]	[illegible]	[illegible]
23	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.7	93	25	47	36
24	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.3	87	25	42	33
25	[illegible]	[illegible]	[illegible]	23	23	32	35	1.9	84	21	38	32
26	28	26	22	23	25	37	31	2.0	84	23	37	30
27	29	25	22	23	26	48	28	2.1	93	28	58	29
28	[illegible]	29	20	20	43	45	30	2.1	134	28	45	29
29	[illegible]	[illegible]	22	20	42	31	28	1.7	255	26	40	29
30	30	[illegible]	22	20	---	29	27	1.6	143	25	38	30
31	29	---	[illegible]	25	---	26	---	1.7	---	[illegible]	37	---
TOTAL	[illegible]	[illegible]	744	621	628	921	1165	169.4	1490.7	[illegible]	1397	[illegible]
MEAN	[illegible]	[illegible]	24.0	20.0	21.7	29.7	38.8	5.47	49.7	[illegible]	[illegible]	[illegible]
MAX	[illegible]	[illegible]	26	22	48	48	76	[illegible]	255	116	[illegible]	57
MIN	[illegible]	22	20	18	18	20	23	1.3	1.1	[illegible]	[illegible]	23
AC-FT	[illegible]	[illegible]	[illegible]	1230	1250	1830	2310	336	2960	[illegible]	2770	1970

CAL YR 1979 TOTAL 21490 MEAN 58.9 MAX 283 MIN 18 AC-FT 42620
WTR YR 1980 TOTAL 11044.1 MEAN 30.2 MAX 255 MIN 1.1 AC-FT 21910

09147500 UNCOMPAHGRE RIVER AT COLONA, CO

LOCATION.--Lat 38°19'53", long 107°46'44", in NW¼NW¼ sec.17, T.47 N., R.8 W., Ouray County, Hydrologic Unit 14020006, on right bank 15 ft downstream from county highway crossing, 0.2 mi north of Colona, and 1.0 mi upstream from Beaton Creek.

DRAINAGE AREA.--448 mi² (revised).

PERIOD OF RECORD.--April 1903 to November 1905, April to June 1936 (gage heights and discharge measurements only), October 1912 to current year. Monthly discharge only for some periods, published in WSP 1313. Published as "near Colona" 1904-5, 1922-34.

REVISED RECORDS.--WSP 1313: 1904.

GAGE.--Water-stage recorder. Datum of gage is 6,3[illegible]8.81 ft above National Geodetic Vertical Datum of 1929. See WSP 1713 or 1733 for history of changes prior to Sept. 30, 1945.

REMARKS.--Estimated daily discharges: Dec. 15-16, 20-22, [illegible]-27, 29, Jan. 1-3, 13-15, 21-28, Feb. 1-3, 11-25, and Mar. 12-14. Records good except for estimated daily discharges, which are fair. Flow regulated by Ridgway Reservoir, 1.7 mi upstream since 1986, total capacity, [illegible] acre-ft. Diversions upstream from station for irrigation of about [illegible] acres downstream from station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--[illegible] years (water years 1904-5, 1913-86), [illegible] ft³/s; [illegible] acre-ft/yr, prior to completion of Ridgway Reservoir.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, [illegible] ft³/s, June 15, 16, 1921; minimum daily, 12 ft³/s, Sept. 19, 1956, May 7, 1967.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, [illegible] ft³/s at [illegible] June [illegible], gage height, [illegible] ft; minimum daily, 66 ft³/s, Mar. 14, Apr. 27.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
9	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
11	[illegible]	[illegible]	134	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
12	142	133	131	[illegible]	92	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
13	137	123	93	111	94	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
14	227	129	98	[illegible]	98	[illegible]	145	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
15	191	130	[illegible]	[illegible]	94	66	142	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
16	140	[illegible]	102	97	94	71	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
17	145	[illegible]	101	97	94	61	119	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
18	160	131	103	99	93	62	[illegible]	[illegible]	[illegible]	158	[illegible]	[illegible]
19	145	[illegible]	104	96	78	69	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
20	137	119	109	[illegible]	98	74	131	136	[illegible]	[illegible]	[illegible]	[illegible]
21	128	114	101	[illegible]	84	87	102	101	[illegible]	[illegible]	[illegible]	[illegible]
22	125	113	102	130	80	92	91	96	241	[illegible]	[illegible]	[illegible]
23	121	109	101	130	71	86	84	90	[illegible]	[illegible]	[illegible]	[illegible]
24	121	109	99	96	72	86	84	83	375	[illegible]	[illegible]	[illegible]
25	[illegible]	107	100	96	76	81	77	119	[illegible]	[illegible]	[illegible]	[illegible]
26	125	111	100	96	93	89	69	177	293	[illegible]	[illegible]	[illegible]
27	125	111	100	94	97	107	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
28	120	104	101	94	94	111	69	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
29	125	109	100	95	87	85	73	264	[illegible]	[illegible]	[illegible]	[illegible]
30	127	104	101	95	---	83	83	265	331	177	[illegible]	[illegible]
31	130	---	99	97	---	79	---	[illegible]	---	[illegible]	[illegible]	---
TOTAL	6958	3763	3156	3031	2582	2456	3010	4958	[illegible]	[illegible]	[illegible]	[illegible]
MEAN	224	125	102	97.8	89.0	79.2	100	160	[illegible]	[illegible]	[illegible]	[illegible]
MAX	356	144	105	101	94	111	152	265	[illegible]	[illegible]	[illegible]	[illegible]
MIN	121	104	93	94	70	66	66	93	175	[illegible]	[illegible]	[illegible]
AC-FT	13800	7460	6260	6010	5120	4870	5970	9830	18560	[illegible]	[illegible]	[illegible]

CAL YR 1997 TOTAL 121031 MEAN 332 MAX 1630 MIN 76 AC-FT 240100
WTR YR 1998 TOTAL 52758 MEAN 144 MAX 518 MIN 66 AC-FT 104600

GUNNISON RIVER BASIN

09149500 UNCOMPAHGRE RIVER AT DELTA, CO

[illegible] long 108°04'49", in SW¼SW¼ sec.13, T.15 S., R.96 W., Delta County, Hydrologic [illegible], on right bank 575 ft downstream from 5th Street Bridge at west edge of Delta and 1.1 mi [illegible]

[illegible]

[illegible] to October 1931 (no winter records in most years), September 1938 to current [illegible] for some periods, published in WSP 1313. Published as "near Delta" 1907-24.

[illegible] WSP 2124: Drainage area.

[illegible] Datum of gage is 4,926.43 ft above National Geodetic Vertical Datum of 1929. Feb. [illegible] water-stage recorder at site [illegible] ft upstream at datum 3.43 ft, higher. Mar. 27, [illegible] water-stage recorder at site 1,[illegible] ft upstream at datum 6.08 ft, higher. See WSP [illegible] prior to Feb. 15, [illegible]

[illegible] Records good except for [illegible], which are fair. Natural flow of stream affected by water diverted from Gunnison [illegible] through Gunnison tunnel published with station 09128000 and other adjacent [illegible] of about [illegible] acres above station, and return flow from irrigated areas. [illegible] and water temperature were obtained and are published elsewhere

[illegible] ft³/s; [illegible] acre-ft yr.

[illegible] May [illegible], gage height, [illegible] ft, from rating [illegible] minimum daily determined since beginning of [illegible]

[illegible] Sept. [illegible], gage height, [illegible] ft; minimum [illegible]

[illegible] SEPTEMBER [illegible]
[illegible]

[illegible]

09151500 ESCALANTE CREEK NEAR DELTA, CO

LOCATION.--Lat 38°45'24", long 108°15'34", in E½ sec.8, T.15 S., R.97 W., Sixth Principal Meridian, Delta County, Hydrologic Unit 14020005, on left bank just upstream from county bridge, 0.2 mi upstream from mouth, and 10.5 mi west of Delta.

DRAINAGE AREA.--209 mi².

PERIOD OF RECORD.--April 1922 to September 1923, May 1976 to current year.

REVISED RECORDS.--WSP 1313: 1923 (monthly runoff). WDR CO-84-2: 1979.

GAGE.--Water-stage recorder. Elevation of gage is 4,810 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to September 1923, nonrecording gage at different datum operated by State Engineer of Colorado.

REMARKS.--Estimated daily discharges: Nov. 9 to Feb. 19. Records good except for estimated daily discharges, which are poor. Diversions upstream from station for irrigation. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--12 years, 63.3 ft³/s; 45,860 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,050 ft³/s, July 24, 1977, gage height, 5.54 ft, from floodmarks, from rating curve extended above 320 ft³/s, on basis of slope-area measurement of peak flow; no flow, June [illegible], 1981.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 415 ft³/s at 0330 April 16, gage height, 4.1[illegible] ft; minimum daily, .45 ft³/s, July [illegible].

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.2	14	14	11	13	22	47	293	56	[illegible]	[illegible]	8.3
2	7.5	27	15	11	15	21	47	217	54	[illegible]	10	7.6
3	7.5	23	15	12	15	15	45	190	43	[illegible]	[illegible]	[illegible]
4	7.4	24	16	12	16	15	51	132	[illegible]	[illegible]	[illegible]	[illegible]
5	7.4	25	16	13	15	15	67	237	32	[illegible]	[illegible]	7.0
6	[illegible]	48	15	12	15	13	87	231	33	[illegible]	[illegible]	[illegible]
7	8.0	42	16	12	15	21	123	176	38	[illegible]	[illegible]	[illegible]
8	7.4	29	16	12	16	17	[illegible]	164	34	[illegible]	[illegible]	[illegible]
9	8.1	29	15	13	17	17	[illegible]	148	[illegible]	[illegible]	[illegible]	[illegible]
10	8.0	27	15	12	17	[illegible]	140	159	31	[illegible]	[illegible]	[illegible]
11	7.6	23	16	13	1[illegible]	17	181	[illegible]	[illegible]	[illegible]	[illegible]	8.4
12	7.8	18	14	13	16	15	[illegible]	12[illegible]	32	[illegible]	[illegible]	8.8
13	7.0	16	14	12	16	15	223	151	31	[illegible]	[illegible]	10
14	8.3	17	12	11	17	16	260	136	27	[illegible]	[illegible]	[illegible]
15	11	17	13	12	17	13	346	157	33	[illegible]	[illegible]	[illegible]
16	9.8	15	13	13	17	21	2[illegible]	171	16	[illegible]	[illegible]	8.5
17	8.5	14	13	14	16	16	240	163	[illegible]	[illegible]	[illegible]	8.9
18	7.6	14	13	15	16	16	199	176	[illegible]	[illegible]	[illegible]	9.8
19	7.9	17	12	16	17	17	193	157	18	[illegible]	[illegible]	9.5
20	7.5	17	13	1[illegible]	18	19	193	143	14	[illegible]	[illegible]	9.0
21	8.0	16	12	14	18	18	173	117	11	[illegible]	[illegible]	8.5
22	8.5	16	13	13	15	15	182	136	10	[illegible]	[illegible]	8.3
23	8.9	15	13	13	15	17	159	97	8.5	[illegible]	[illegible]	8.9
24	8.3	15	13	13	16	28	150	93	8.5	[illegible]	[illegible]	9.8
25	8.6	15	12	13	16	30	144	80	7.8	[illegible]	[illegible]	9.8
26	12	17	12	13	17	31	150	83	7.0	[illegible]	[illegible]	9.4
27	10	15	13	13	17	43	160	77	7.8	[illegible]	7.2	9.4
28	9.8	14	13	13	23	74	183	76	11	[illegible]	7.8	9.4
29	10	14	12	14	22	59	197	63	12	[illegible]	[illegible]	9.4
30	9.8	13	13	14	---	76	249	65	22	[illegible]	5.5	9.4
31	14	---	13	15	---	61	---	65	---	[illegible]	5.1	---
TOTAL	267.7	593	427	403	484	835	5150	4626	641.1	135.37	[illegible]	246.3
MEAN	8.64	19.8	13.8	13.0	16.7	26.9	172	149	21.4	[illegible]	7.64	8.21
MAX	14	48	16	16	23	76	346	293	56	[illegible]	[illegible]	10
MIN	7.0	13	12	11	15	15	42	63	7.0	.45	[illegible]	[illegible]
AC-FT	531	1180	847	799	960	1660	10220	9180	1270	[illegible]	[illegible]	489

CAL YR 1987 TOTAL 26731.4 MEAN 73.2 MAX 750 MIN 5.0 AC-FT 53000
WTR YR 1988 TOTAL 14109.67 MEAN 38.6 MAX 346 MIN .45 AC-FT 27990

09152500 GUNNISON RIVER NEAR GRAND JUNCTION, CO

LOCATION.--Lat 38°59'00", long 108°27'00", in NE¼SW¼ of sec.14, T.2 S., R .1 E., Ute Meridian, Mesa County, Hydrologic Unit 14020005, on right bank 180 ft upstream from bridge on State Highway 141, 0.4 mi downstream from Whitewater Creek, 0.5 mi south of Whitewater, and 8 mi southeast of Grand Junction.

DRAINAGE AREA.--7,928 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1894 to December 1895 (gage heights only), October 1896 to September 1899, October 1901 to October 1906, October 1916 to current year. Monthly discharge only for some periods, published in WSP 1313. Published as "at Whitewater" 1901-6.

REVISED RECORDS.--WSP 509: Drainage area at former site. WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 4,628.12 ft above National Geodetic Vertical Datum of 1929. See WSP 1713 or 1924 for history of changes prior to October 1959.

REMARKS.--Estimated daily discharges: Jan. 24-28, Aug. 4, 5, 8, 9, and Aug. 22-24. Records good. Records show flow that enters Colorado River from Gunnison River basin except for about 60 ft³/s diverted downstream from gage during irrigation season. Natural flow of river affected by diversions for irrigation of about 233,000 acres upstream from station, storage reservoirs, and return flow from irrigated lands.

AVERAGE DISCHARGE.--83 years (water years 1897-99, 1902-06, 1917-88), 2,621 ft³/s; 1,899,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 35,700 ft³/s, May 23, 1920, gage height, 14.95 ft, site and datum then in use, from rating curve extended above 22,000 ft³/s; minimum daily, 106 ft³/s, July 29, 1934.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,770 ft³/s at 1930 May 18, gage height, 5.18 ft; minimum daily, 645 ft³/s, July 25.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1270
2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1450
3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1230
4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1190
5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1240
6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	766	[illegible]
7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
9	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	967	[illegible]	[illegible]
10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2482	1631	2330	926	822	1120
11	[illegible]	[illegible]	[illegible]	2090	[illegible]	[illegible]	[illegible]	1592	[illegible]	957	744	1090
12	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1621	[illegible]	934	772	1460
13	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1970	[illegible]	[illegible]	[illegible]	[illegible]
14	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	763	2290
15	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
16	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
17	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
18	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
19	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
20	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
21	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1650
22	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
23	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
24	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
25	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
26	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1520
27	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
28	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1490
29	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2700	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1470
30	[illegible]	[illegible]	[illegible]	[illegible]	---	2750	[illegible]	2210	[illegible]	[illegible]	[illegible]	1470
31	[illegible]	---	[illegible]	[illegible]	---	2720	---	2310	---	846	1020	---
TOTAL	[illegible]	[illegible]	[illegible]	64290	[illegible]	[illegible]	76030	71210	[illegible]	[illegible]	[illegible]	[illegible]
MEAN	[illegible]	[illegible]	[illegible]	[illegible]	2156	2242	2534	2297	1787	[illegible]	864	[illegible]
MAX	[illegible]	[illegible]	[illegible]	2490	2610	2760	3500	3510	[illegible]	[illegible]	[illegible]	[illegible]
MIN	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1710	[illegible]	[illegible]	[illegible]	645	[illegible]	[illegible]
AC-FT	[illegible]	[illegible]	[illegible]	127500	124000	137900	150800	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

CAL YR 1987 TOTAL [illegible] MEAN 3116 MAX 9120 MIN 1490 AC-FT 2256000

WTR YR 1988 TOTAL [illegible] MEAN 1954 MAX 3510 MIN 645 AC-FT [illegible]

09152500 GUNNISON RIVER NEAR GRAND JUNCTION, CO--Continued
(Irrigation network station)
(National stream-quality accounting network station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1931 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: November 1935 to September 1974, September 1975 to current year.
WATER TEMPERATURES: April 1949 to September 1974, September 1975 to current year.

INSTRUMENTATION.--Water-quality monitor since September 1975.

REMARKS.--Daily maximum and minimum specific-conductance data available in district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, [illegible] microsiemens several days during [illegible] and September [illegible]; minimum, 194 microsiemens June [illegible], 1979.
WATER TEMPERATURES: Maximum, [illegible]°C Aug. [illegible], [illegible]; minimum, [illegible]°C on many days during winter months most years.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum recorded, [illegible] microsiemens Aug. [illegible], may have been higher during period of missing record August [illegible]; minimum recorded, [illegible] microsiemens [illegible], [illegible] and May [illegible].
WATER TEMPERATURES: Maximum, [illegible]°C July [illegible], may have been higher during period of missing record Aug. [illegible]; minimum, 0.0°C several days in winter months.

WATER QUALITY DATA, WATER YEAR OCTOBER [illegible] TO SEPTEMBER [illegible]

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
NOV												
[illegible]...	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
FEB												
[illegible]...	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
APR												
[illegible]...	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
JUN												
[illegible]...	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
AUG												
[illegible]...	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
SEP												
[illegible]...	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
NOV												
19...	[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
FEB												
[illegible]...	42	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
APR												
[illegible]...	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
JUN												
[illegible]...	[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
AUG												
16...	47	2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
SEP												
[illegible]...	[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

K Based on non-ideal colony count

09152500 GUNNISON RIVER NEAR GRAND JUNCTION, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHOROUS TOTAL (MG/L AS P)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P)	PHOS-PHOROUS ORTHO, DIS-SOLVED (MG/L AS P)
NOV 13...	[illegible]	3910	--	<0.01	0.82	[illegible]	[illegible]	0.17	[illegible]	0.02	0.01	<0.01
FEB [illegible]...	0.64	[illegible]	--	<0.01	0.56	[illegible]	0.01	0.48	[illegible]	0.04	0.02	<0.01
APR [illegible]...	[illegible]	[illegible]	--	<0.01	[illegible]	[illegible]	[illegible]	0.46	0.50	0.08	0.02	<0.01
JUN [illegible]...	[illegible]	[illegible]	1.47	0.02	[illegible]	[illegible]	0.08	0.95	1.0	0.10	0.02	<0.01
AUG 1[illegible]...	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.60	[illegible]	0.03	<0.01
SEP [illegible]...	[illegible]	[illegible]	--	<0.01	[illegible]	[illegible]	<0.01	[illegible]	0.60	0.12	0.05	[illegible]

DATE	TIME	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)
NOV [illegible]...	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	--	<1	[illegible]	[illegible]	<5
APR [illegible]...	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	<1	<1	[illegible]	2	7	<5
AUG [illegible]...	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	<1	<1	[illegible]	1	7	<5
SEP [illegible]...	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	<1	<1	[illegible]	2	[illegible]	<5

DATE	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)
NOV [illegible]...	[illegible]	7	<0.1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
APR [illegible]...	[illegible]	[illegible]	<0.1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
AUG 16...	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
SEP [illegible]...	[illegible]	5	<0.1	[illegible]	<1	8	[illegible]	[illegible]	[illegible]	[illegible]

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
NOV 1[illegible]...	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
FEB [illegible]...	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
APR [illegible]...	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
JUN [illegible]...	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
AUG [illegible]...	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
SEP [illegible]...	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

09152500 GUNNISON RIVER NEAR GRAND JUNCTION, CO--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1020	946	757	700	729	661	610	614	737	1160	1380	1410
2	1040	951	745	---	---	693	612	573	760	1110	1340	1360
3	1040	943	745	---	---	672	614	576	771	1180	1370	1320
4	1040	906	743	---	---	680	610	597	820	1230	---	1220
5	1040	895	743	750	711	716	595	[illegible]	876	1250	---	1230
6	1040	833	744	792	697	[illegible]	[illegible]	618	730	1260	---	[illegible]
7	[illegible]	869	[illegible]	791	[illegible]	770	[illegible]	[illegible]	[illegible]	[illegible]	---	[illegible]
8	1030	869	742	761	641	[illegible]	[illegible]	[illegible]	728	[illegible]	---	[illegible]
9	[illegible]	885	[illegible]	727	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	---	[illegible]
10	[illegible]	887	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	---	[illegible]
11	[illegible]	[illegible]	[illegible]	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	---	[illegible]
12	[illegible]	873	---	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	---	[illegible]
13	[illegible]	[illegible]	---	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	---	[illegible]
14	[illegible]	[illegible]	---	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	---	[illegible]
15	[illegible]	[illegible]	---	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	---	[illegible]
16	[illegible]	[illegible]	---	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	---	[illegible]
17	[illegible]	[illegible]	---	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	---	---	[illegible]
18	[illegible]	[illegible]	---	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	---	[illegible]
19	[illegible]	[illegible]	---	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	---	[illegible]
20	[illegible]	[illegible]	[illegible]	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	---	[illegible]
21	[illegible]	[illegible]	[illegible]	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	---	[illegible]
22	[illegible]	[illegible]	[illegible]	---	[illegible]	[illegible]	[illegible]	[illegible]	---	[illegible]	---	[illegible]
23	[illegible]	[illegible]	[illegible]	---	[illegible]	[illegible]	[illegible]	[illegible]	---	[illegible]	---	[illegible]
24	[illegible]	[illegible]	[illegible]	---	[illegible]	[illegible]	[illegible]	[illegible]	---	[illegible]	---	[illegible]
25	[illegible]	[illegible]	[illegible]	---	[illegible]	[illegible]	[illegible]	[illegible]	---	[illegible]	[illegible]	[illegible]
26	[illegible]	[illegible]	[illegible]	---	[illegible]	[illegible]	[illegible]	[illegible]	---	[illegible]	[illegible]	[illegible]
27	[illegible]	[illegible]	---	---	[illegible]	[illegible]	[illegible]	[illegible]	---	[illegible]	[illegible]	[illegible]
28	[illegible]	[illegible]	[illegible]	---	[illegible]	[illegible]	[illegible]	[illegible]	---	[illegible]	[illegible]	[illegible]
29	[illegible]	[illegible]	[illegible]	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
30	[illegible]	[illegible]	[illegible]	[illegible]	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
31	[illegible]	---	[illegible]	[illegible]	---	[illegible]	---	[illegible]	---	[illegible]	[illegible]	---
MEAN	[illegible]	[illegible]	---	---	---	[illegible]	[illegible]	[illegible]	---	---	---	[illegible]

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TOP

09152500 GUNNISON RIVER NEAR GRAND JUNCTION, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	15.0	11.6	10.9	9.5	3.7	2.2	1.8	.6	1.5	.2	5.3	4.1
2	15.2	11.8	10.8	9.9	3.8	2.4	1.6	.0	2.4	1.7	6.7	5.5
3	15.1	11.8	11.0	9.8	4.4	2.5	.7	.0	3.2	1.9	7.4	5.5
4	14.9	11.6	10.6	9.1	4.7	3.4	.0	.0	2.9	2.0	7.3	5.5
5	14.9	11.6	10.1	8.6	4.7	3.7	.0	.0	2.9	1.8	7.7	5.2
6	14.9	11.6	10.3	9.0	5.6	4.7	.0	.0	3.7	1.4	7.7	5.7
7	14.6	11.6	9.7	8.6	6.5	4.3	.9	.0	2.8	.0	7.5	4.9
8	14.3	12.0	8.8	7.6	5.0	3.6	2.0	1.0	1.8	.0	6.6	4.4
9	14.3	11.4	8.8	7.3	4.4	3.4	2.0	.9	1.5	.0	6.3	5.0
10	14.5	11.7	8.1	7.0	4.9	3.3	1.8	.9	1.7	.0	5.5	3.8
11	14.5	11.5	8.6	6.9	5.6	4.1	2.0	.7	1.7	.4	5.3	3.6
12	13.5	11.5	8.1	6.7	3.8	2.2	2.0	1.0	2.3	1.0	6.2	4.9
13	13.6	11.8	7.3	6.1	2.0	.9	1.8	.2	3.1	1.3	5.8	3.4
14	13.6	10.9	7.3	6.6	1.8	.7	1.7	.0	3.6	1.5	4.4	1.4
15	12.7	10.6	6.8	5.2	2.0	.7	.3	.0	3.8	1.4	4.4	2.2
16	12.1	11.0	5.5	4.4	1.2	.0	.0	.0	3.6	1.1	5.0	2.0
17	12.2	10.0	4.8	3.9	1.2	.3	.0	.0	3.6	1.3	5.1	3.0
18	11.7	9.4	4.3	3.1	2.5	.9	.2	.0	3.7	1.4	5.7	3.4
19	11.5	9.1	4.4	2.9	3.1	2.3	1.6	.3	3.7	1.1	6.9	3.6
20	11.1	8.5	5.0	3.0	3.7	2.9	2.5	1.2	3.5	1.2	8.6	4.8
21	10.5	8.0	4.8	3.5	3.9	3.0	1.6	.0	2.9	.9	9.3	5.9
22	10.2	7.7	4.7	3.4	3.8	2.6	.2	.0	3.3	1.5	9.6	7.1
23	9.4	7.9	5.2	3.7	2.9	1.4	.0	.0	4.1	2.1	9.4	6.6
24	10.7	8.5	5.4	4.0	3.3	2.3	1.2	.0	4.6	2.4	9.2	6.7
25	12.1	10.1	4.5	3.6	3.0	2.0	.0	.0	5.0	2.8	9.6	6.6
26	12.1	10.5	4.1	3.5	1.9	.0	---	---	5.3	2.9	10.5	7.0
27	11.4	9.3	4.6	3.4	.9	.0	.0	.0	5.5	3.1	10.3	7.9
28	10.4	9.9	4.6	3.4	.9	.0	.0	.0	5.6	3.4	---	---
29	10.3	8.9	3.5	2.3	1.2	.2	.0	.0	6.0	3.8	5.1	3.7
30	10.6	9.5	3.6	2.2	1.0	.0	.0	.0	---	---	5.5	4.3
31	10.6	9.3	---	---	1.2	.0	.0	.0	---	---	6.0	4.8
MONTH	15.2	7.7	11.0	2.2	6.5	.0	---	---	6.0	.0	---	---

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	7.3	4.7	---	---	16.2	10.5	23.9	19.6	24.3	22.0	21.5	18.6
2	8.7	5.7	10.7	8.5	18.6	13.7	24.1	20.3	23.0	21.3	21.2	17.6
3	9.5	7.1	12.0	8.2	20.1	15.6	23.2	20.8	25.3	21.7	20.9	17.9
4	8.9	7.9	12.5	9.6	---	---	23.0	21.1	---	---	20.8	17.6
5	9.5	7.1	13.6	10.3	21.1	17.9	22.8	20.1	---	---	20.3	17.5
6	11.5	7.1	12.6	10.5	---	---	23.3	19.5	---	---	19.6	16.8
7	12.9	9.0	11.6	9.1	19.1	16.6	24.3	20.5	---	---	19.4	16.6
8	---	---	12.0	8.9	19.6	16.3	24.6	21.1	---	---	19.2	16.4
9	9.7	7.6	14.1	10.4	19.7	16.6	24.4	22.2	---	---	18.7	16.2
10	---	---	15.9	11.3	19.7	16.5	24.0	21.0	---	---	17.6	15.7
11	10.6	6.2	17.4	12.4	19.0	16.1	23.2	20.2	---	---	15.5	14.2
12	11.1	8.0	18.0	13.7	18.6	13.4	24.1	20.7	---	---	14.1	13.3
13	12.2	8.8	17.4	13.6	19.0	14.6	25.3	21.4	---	---	13.7	12.1
14	12.4	9.9	17.9	14.6	---	---	25.1	22.4	---	---	14.3	12.6
15	12.8	10.1	17.6	13.6	20.1	16.0	23.8	22.7	---	---	15.1	12.3
16	---	---	17.1	14.1	20.9	16.4	24.4	21.4	---	---	16.0	12.9
17	10.2	9.2	15.9	14.2	20.4	15.8	24.8	21.1	---	---	16.6	13.3
18	---	---	14.2	12.5	---	---	25.0	21.1	---	---	16.8	14.5
19	11.0	8.0	13.4	11.7	21.3	17.0	25.1	21.2	---	---	14.9	12.1
20	12.9	9.0	12.4	9.5	21.5	18.7	25.2	20.5	---	---	17.1	12.1
21	11.5	10.2	14.3	10.1	22.5	18.9	25.3	21.2	---	---	18.1	15.0
22	10.1	8.3	16.0	10.6	---	---	25.5	21.5	---	---	16.9	13.7
23	9.7	7.9	17.3	10.4	---	---	25.5	21.8	---	---	14.9	12.3
24	11.3	8.2	18.3	12.1	---	---	26.0	21.4	---	---	14.7	12.3
25	12.2	9.1	17.6	13.4	---	---	26.0	21.9	25.5	22.4	15.0	12.2
26	11.2	8.3	17.7	14.4	---	---	25.6	22.3	23.3	21.8	14.1	12.4
27	12.9	8.9	17.8	14.2	---	---	24.0	21.4	23.8	20.9	14.1	11.8
28	13.8	10.8	---	---	---	---	24.7	21.7	22.6	20.5	13.2	11.4
29	14.8	11.7	18.1	15.7	23.2	21.2	26.1	21.6	21.8	19.0	13.0	10.4
30	15.1	12.4	15.9	14.4	22.8	19.4	24.7	22.1	21.8	19.9	13.1	10.4
31	---	---	14.4	12.3	---	---	25.8	22.1	22.1	19.1	---	---
MONTH	---	---	---	---	---	---	26.1	19.5	---	---	21.5	10.4

09153290 REED WASH NEAR MACK, CO

LOCATION.--Lat 39°12'41", long 108°48'11", in SE¼SW¼ sec.27, T.2 N., R.3 W., Ute Meridian, Mesa County, Hydrologic Unit 14010005, on right bank 250 ft upstream from unnamed tributary, 0.4 mi downstream from Peck and Beede Wash, and 3.5 mi east of Mack.

DRAINAGE AREA.--15.7 mi^2.

PERIOD OF RECORD.--October 1975 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 4,505 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Jan. 1-3, 13, 14, 20-26, and Feb. 5-8. Records good except for estimated daily discharges, which are fair. Flow is mostly return flow and waste water from irrigated lands under Government Highline and Grand Valley Canals. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--13 years, 44.9 ft^3/s; 32,530 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 390 ft^3/s, July 23, 1983, gage height, unknown, maximum recorded gage height, 6.09 ft, July 24, 1979; minimum daily discharge, 2.0 ft^3/s, Jan. 31, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 110 ft^3/s at 0900 Aug. 14, gage height, 4.10 ft; minimum daily, 3.6 ft^3/s, Apr. 6-7.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	78	77	8.3	7.2	4.7	5.0	3.8	52	58	58	69	63
2	78	69	8.5	6.9	4.7	4.7	3.8	49	61	59	70	65
3	80	21	8.5	6.6	4.8	4.3	3.9	43	62	62	72	63
4	78	14	8.5	6.4	4.4	4.4	3.9	38	73	75	70	65
5	86	13	8.6	6.3	4.3	4.4	3.7	43	84	68	72	69
6	80	16	8.4	6.3	4.2	4.4	3.6	49	83	67	80	68
7	77	13	8.2	6.3	4.1	4.2	3.6	52	72	66	82	67
8	80	12	14	6.3	4.0	4.1	27	49	69	60	92	75
9	87	12	84	6.1	4.0	4.1	65	57	70	56	97	73
10	85	12	79	6.0	4.0	4.2	70	61	53	64	90	74
11	86	12	80	6.0	4.1	4.2	63	64	55	72	88	72
12	82	11	77	5.9	4.1	4.2	62	64	58	71	87	79
13	83	10	75	5.8	4.2	4.3	63	70	58	64	92	76
14	91	11	66	5.8	4.2	4.4	62	66	50	66	95	80
15	82	10	10	5.7	4.2	4.7	71	63	50	62	90	76
16	78	9.3	8.5	5.6	4.2	4.7	66	61	55	67	89	79
17	77	9.1	8.3	5.6	4.2	4.4	64	59	55	62	82	74
18	76	8.9	8.5	5.6	4.2	4.4	63	62	64	62	87	75
19	78	8.5	8.5	5.5	4.2	4.0	53	62	58	63	90	70
20	79	8.5	8.3	5.4	4.2	3.9	54	58	59	59	76	65
21	77	8.1	8.1	5.2	4.2	4.0	58	65	53	61	72	73
22	76	8.2	8.0	5.1	4.3	4.2	59	63	55	62	67	83
23	73	8.2	8.0	5.1	4.6	4.1	57	61	63	68	71	81
24	72	8.3	8.0	5.0	4.3	4.1	69	53	66	66	75	81
25	74	8.5	7.8	5.0	5.4	4.1	57	54	60	64	77	76
26	74	8.5	7.7	5.0	7.4	4.1	55	59	62	62	71	68
27	74	8.5	7.5	5.0	6.1	4.1	54	60	60	63	74	67
28	71	8.7	7.5	4.9	5.2	4.0	50	59	59	62	70	71
29	76	8.7	7.5	4.8	4.6	3.9	50	53	60	62	68	70
30	78	8.4	7.5	4.7	---	4.2	47	54	58	66	65	70
31	80	---	7.4	4.7	---	4.1	---	53	---	74	69	---
TOTAL	2446	441.4	671.1	175.8	131.1	131.9	1365.3	1756	1843	1993	2449	2168
MEAN	78.9	14.7	21.6	5.67	4.52	4.25	45.5	56.6	61.4	64.3	79.0	72.3
MAX	91	77	84	7.2	7.4	5.0	71	70	84	75	97	83
MIN	71	8.1	7.4	4.7	4.0	3.9	3.6	38	50	56	65	63
AC-FT	4850	876	1330	349	260	262	2710	3480	3660	3950	4860	4300

CAL YR 1987 TOTAL 16467.7 MEAN 45.1 MAX 102 MIN 2.8 AC-FT 32660
WTR YR 1988 TOTAL 15571.6 MEAN 42.5 MAX 97 MIN 3.6 AC-FT 30890

09163500 COLORADO RIVER NEAR COLORADO-UTAH STATE LINE

LOCATION.--Lat 39°07'45", long 109°01'36", in SE¼NW¼ sec.5, T.11 S., R.104 W., Mesa County, Hydrologic Unit 14010005, on right bank 0.7 mi downstream from McDonald Creek, 12 mi southwest of Mack, Colo., and 1.5 mi upstream from Colorado-Utah State line.

DRAINAGE AREA.--17,843 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1951 to current year.

REVISED RECORDS.--WRD Colo. 1974: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 4,325 ft above National Geodetic Vertical Datum of 1929, from topographic map. May 1951, to October 1979, water-stage recorder at site 5.7 mi upstream at different datum.

REMARKS.--Estimated daily discharges: Dec. 9 to Feb. 13. Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by transmountain diversions, storage reservoirs, power development, and diversions for irrigation. (Records include all return flow from irrigated areas).

AVERAGE DISCHARGE.--37 years, 6,364 ft^3/s; 4,611,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 69,800 ft^3/s, May 27, 1984, gage height, 16.12 ft, (from highwater mark); minimum daily, 960 ft^3/s, Sept. 7, 1956.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 15,400 ft^3/s at 0630 May 19, gage height, 5.92 ft; minimum daily, 2,280 ft^3/s, July 27.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3980	4640	4160	3100	3230	5280	5260	5790	10200	7320	2780	3110
2	3920	5000	4070	2900	2990	5210	4980	7120	8820	6700	2990	3430
3	3900	5400	4130	2950	3280	4690	4840	7130	7840	6210	2960	3310
4	3870	5060	4240	3060	3310	4990	4880	6460	8350	6030	2780	3050
5	3890	4860	4340	3150	3310	4910	5000	5920	10700	5920	2580	3060
6	3940	5490	4530	3250	2990	4820	4500	5860	13400	5680	2520	3020
7	3970	5210	4360	3500	2990	4770	4630	6370	13800	5290	2720	3020
8	3910	5100	4200	3200	3200	4330	4980	6440	13400	4700	2850	3000
9	3880	4970	4000	3060	3350	4790	5650	5960	12700	4340	2910	2900
10	3990	4830	3800	2640	3410	4700	5810	5410	12100	4070	2800	2890
11	4060	4770	3980	2680	3400	4700	5320	5040	11700	3920	2630	2990
12	4130	4740	3820	2840	3390	4530	5200	4850	11700	3840	2530	3410
13	4190	4730	3500	2960	3570	4110	5130	5350	10700	3660	2590	5510
14	4420	4600	3300	2740	4130	4100	5470	6670	9950	3430	2570	5830
15	4690	4700	3200	2680	4220	4470	6320	8530	8260	3280	2570	4900
16	4530	4650	3400	2600	4220	4410	7170	10300	7690	2930	2630	4630
17	4470	4580	3460	2760	4240	4480	7260	11400	7630	2820	2650	4370
18	4440	4500	3520	2860	4150	4340	7280	13100	7520	2770	2790	4150
19	4450	4400	3700	2940	4110	4240	6920	15000	7380	2710	2820	4060
20	4460	4340	3800	2990	4140	4090	6310	14500	7460	2550	2810	3980
21	4420	4400	3860	3000	4170	4120	6200	12500	7950	2460	2750	4020
22	4420	4390	3840	2920	4490	4180	6710	10700	7730	2330	3240	4080
23	4330	4360	3800	3200	4670	4330	6850	9070	7530	2340	3300	4080
24	4380	4380	3500	3540	4600	4380	6720	8100	7130	2360	3210	3990
25	4460	4290	3360	3600	4680	4400	6420	7900	7540	2350	3100	3920
26	4520	4280	3400	3600	4690	4490	6050	8190	7110	2290	2980	3750
27	4450	4300	3480	3440	4800	4610	5670	8560	6730	2280	3160	3670
28	4440	4260	3550	3300	4890	4870	5420	9350	6510	2360	3300	3550
29	4470	4180	3600	3440	5180	5210	5350	10000	6270	2380	3370	3440
30	4590	4080	3540	3310	---	5350	5350	11400	7450	2370	3360	3450
31	4700	---	3300	3280	---	5280	---	12100	---	2500	3240	---
TOTAL	132270	139490	116740	95490	113800	143680	173650	265070	273250	114190	89490	112570
MEAN	4267	4650	3766	3080	3924	4635	5788	8551	9108	3684	2887	3752
MAX	4700	5490	4530	3600	5180	5350	7280	15000	13800	7320	3370	5830
MIN	3870	4080	3200	2600	2990	4090	4500	4850	6270	2280	2520	2890
AC-FT	262400	276700	231600	189400	225700	285000	344400	525800	542000	226500	177500	223300

CAL YR 1987 TOTAL 2384700 MEAN 6533 MAX 22000 MIN 3200 AC-FT 4730000
WTR YR 1988 TOTAL 1769690 MEAN 4835 MAX 15000 MIN 2280 AC-FT 3510000

09163500 COLORADO RIVER NEAR COLORADO-UTAH STATE LINE--Continued
(National stream-quality accounting network station)

PERIOD OF RECORD.--October 1979 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1979 to current year.
WATER TEMPERATURE: October 1979 to current year.

INSTRUMENTATION.--Water-quality monitor since October 1979.

REMARKS.--Water-quality data collection was moved 5.5 miles upstream to this site from previous site 09163530. Water-quality records for this site are considered to be equivalent to data obtained at old site. Daily maximum and minimum specific-conductance data available in district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 1,940 microsiemens Aug. 13, 1981; minimum, 277 microsiemens June 11, 1985.
WATER TEMPERATURE: Maximum, 27.0°C Aug. 7-9, 1981; minimum, 0.0°C on many days during winter months

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 1,720 microsiemens Aug. 22; minimum, 440 microsiemens June 9.
WATER TEMPERATURE: Maximum, 25.7°C July 25, 29, and 30; minimum, 0.0°C on many days during winter months.

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (US/CM)	PH (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	TURBIDITY (FTU)	OXYGEN, DISSOLVED (MG/L)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS TOTAL (MG/L AS CACO3)
OCT										
27...	1200	4400	1300	8.2	11.0	57	8.9	48	85	460
NOV										
24...	1300	4440	1150	8.3	3.5	--	--	--	--	380
DEC										
16...	1300	3650	1080	8.2	0.0	3.5	12.6	K3	53	350
JAN										
27...	1040	3580	1030	8.2	0.0	--	--	--	--	310
FEB										
17...	1200	4220	1010	8.1	1.0	15	12.2	K6	150	310
MAR										
18...	1200	4450	1010	8.2	4.5	--	--	--	--	290
APR										
12...	1300	5460	834	8.2	10.5	75	9.1	K56	110	270
MAY										
24...	1000	8220	675	8.2	14.5	--	--	--	--	240
JUN										
14...	1300	10200	607	7.7	16.0	57	8.6	100	210	220
JUL										
26...	1300	2300	1420	8.3	23.5	--	--	--	--	540
AUG										
30...	1300	3430	1400	8.2	21.5	100	6.7	210	510	540
SEP										
29...	1200	3380	1300	8.4	13.5	--	--	--	--	480

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE WATER DIS IT FIELD MG/L AS HCO3	CARBONATE WATER DIS IT FIELD MG/L AS CO3	ALKALINITY WAT DIS TOT IT FIELD MG/L AS CACO3	ALKALINITY LAB (MG/L AS CACO3)
OCT									
27...	120	39	100	2	4.7	202	0	155	170
NOV									
24...	96	33	100	2	3.6	--	--	--	160
DEC									
16...	87	32	95	2	3.5	174	0	141	154
JAN									
27...	81	27	91	2	4.0	--	--	--	157
FEB									
17...	78	27	90	2	4.2	172	0	137	145
MAR									
18...	75	26	89	2	3.4	--	--	--	142
APR									
12...	69	23	69	2	3.3	161	0	132	130
MAY									
24...	64	20	51	1	2.0	--	--	--	115
JUN									
14...	58	17	41	1	2.2	117	0	96	103
JUL									
26...	140	46	120	2	4.4	--	--	--	162
AUG									
30...	140	46	120	2	4.9	205	0	168	175
SEP									
29...	120	44	110	2	3.6	--	--	--	164

K Based on non-ideal colony count

09163500 COLORADO RIVER NEAR COLORADO-UTAH STATE LINE--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)
OCT									
27...	390	88	0.40	11	878	860	1.19	10400	0.790
NOV									
24...	300	86	0.30	12	--	730	0.99	8750	--
DEC									
16...	270	84	0.30	11	715	670	0.97	7050	0.650
JAN									
27...	240	95	0.40	12	--	647	0.88	6250	--
FEB									
17...	230	87	0.40	11	624	618	0.85	7110	0.560
MAR									
18...	230	85	0.30	9.9	--	605	0.82	7270	--
APR									
12...	190	57	0.30	11	523	503	0.71	7710	--
MAY									
24...	170	33	0.30	11	--	428	0.58	9490	--
JUN									
14...	150	32	0.20	8.7	381	373	0.52	10500	0.410
JUL									
26...	490	110	0.30	7.2	--	1010	1.37	6270	--
AUG									
30...	470	100	0.40	12	1050	1010	1.43	9720	1.09
SEP									
29...	430	98	0.40	9.3	--	917	1.25	8370	--

DATE	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHOROUS TOTAL (MG/L AS P)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P)	PHOS-PHOROUS ORTHO, DIS-SOLVED (MG/L AS P)
OCT									
27...	0.01	0.80	0.02	0.04	3.4	3.4	0.01	<0.01	<0.01
NOV									
24...	--	0.77	--	--	--	--	--	--	--
DEC									
16...	0.02	0.67	0.03	0.03	--	<0.20	0.02	0.01	<0.01
JAN									
27...	--	0.63	--	--	--	--	--	--	--
FEB									
17...	0.01	0.57	0.06	0.08	0.34	0.40	0.08	0.03	0.04
MAR									
18...	--	0.39	--	--	--	--	--	--	--
APR									
12...	<0.01	0.47	0.09	0.09	0.51	0.60	0.20	0.04	0.02
MAY									
24...	--	0.52	--	--	--	--	--	--	--
JUN									
14...	0.01	0.42	0.02	0.02	0.38	0.40	0.07	0.03	<0.01
JUL									
26...	--	0.96	--	--	--	--	--	--	--
AUG									
30...	0.01	1.10	0.08	0.06	0.52	0.60	0.04	0.03	<0.01
SEP									
29...	--	0.79	--	--	--	--	--	--	--

DATE	TIME	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)
OCT											
27...	1200	<10	2	60	<0.5	<1	<1	<3	5	10	7
FEB											
17...	1200	40	1	53	<0.5	2	<1	<3	5	39	<5
JUN											
14...	1300	40	1	45	<0.5	<1	<1	<3	5	34	<5
AUG											
30...	1300	100	1	75	<0.5	3	<1	<3	20	43	<5

09163500 COLORADO RIVER NEAR COLORADO-UTAH STATE LINE--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)
OCT										
27...	53	6	<0.1	<10	1	6	<1.0	1200	<6	<3
FEB										
17...	34	24	<0.1	10	4	4	<1.0	750	<6	7
JUN										
14...	21	5	<0.1	<10	5	3	1.0	530	<6	<3
AUG										
30...	67	5	<0.1	20	2	11	<1.0	1600	<6	42

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT					
27...	1200	4400	166	1970	88
FEB					
17...	1200	4220	87	994	63
APR					
12...	1330	5460	336	[illegible]	57
JUN					
14...	1300	10200	135	[illegible]	68
AUG					
30...	1300	3430	354	3280	37

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1300	1250	1110	---	---	921	863	857	526	775	1400	1390
2	1320	1280	1130	---	---	949	887	792	593	[illegible]	1360	1400
3	1330	1220	1110	---	---	969	930	736	649	763	1390	1390
4	1330	1210	1120	---	---	1020	916	739	605	787	1390	1330
5	1320	1180	1110	---	945	959	919	770	607	840	1370	1350
6	1330	1190	1080	---	932	930	909	804	507	859	1390	1370
7	1330	1130	1100	1040	931	912	989	821	491	875	1410	1380
8	1310	1190	1130	1060	953	998	973	773	456	[illegible]	1430	1380
9	1320	1180	1100	1050	1000	902	971	783	459	[illegible]	[illegible]	1280
10	1310	1150	1070	---	1030	913	867	812	476	950	1420	1400
11	1300	1150	1060	1010	998	895	833	852	487	1010	1430	1390
12	1290	1160	1090	---	988	901	826	882	498	1040	1450	1390
13	1290	1160	1070	---	994	927	818	895	527	1060	1460	1330
14	1300	1140	1070	---	969	990	822	828	564	1080	1470	1270
15	1300	1150	1040	---	990	985	823	712	604	1100	1470	1290
16	1310	1150	1080	---	1010	931	765	605	657	1130	1480	1240
17	1310	1160	1110	---	984	956	714	539	679	1210	1480	1220
18	1290	1150	1130	---	994	949	706	530	682	1250	1480	1190
19	1280	1150	1170	---	981	932	716	494	681	1280	1470	1230
20	1260	1150	1140	---	986	958	735	494	688	1300	1440	1250
21	1270	1150	1100	---	954	977	763	527	674	1330	1450	1240
22	1270	1170	1080	1080	940	992	774	569	654	1350	1560	1230
23	1270	1160	1060	1110	950	985	757	621	662	1380	1470	1260
24	1280	1140	1070	1030	936	983	762	654	679	1380	1480	1230
25	1280	1110	1090	1090	918	979	781	670	707	1380	1500	1230
26	1290	1110	---	1150	898	966	814	665	687	1390	1520	1260
27	1290	1100	---	---	916	949	832	637	713	1410	1430	1240
28	1290	1110	---	---	927	928	855	609	777	1400	1350	1260
29	1260	1110	---	---	923	894	873	576	790	1410	1400	1290
30	1260	1110	---	---	---	901	869	544	819	1410	1380	1300
31	1240	---	---	---	---	881	---	519	---	1410	1390	---
MEAN	1290	1160	---	---	---	943	833	687	622	1140	1430	1300

09163500 COLORADO RIVER NEAR COLORADO-UTAH STATE LINE--Continued

TRMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	16.4	13.6	11.1	10.5	2.4	1.5	.0	.0	.5	.0	7.8	6.7
2	16.5	13.2	11.2	10.6	2.6	1.6	.0	.0	1.2	.4	7.8	6.6
3	16.6	13.4	11.4	10.4	2.9	1.9	.0	.0	2.3	.9	8.5	6.8
4	16.2	13.3	11.1	10.2	3.2	2.2	.0	.0	1.5	.5	8.2	7.0
5	16.5	13.6	10.7	9.9	3.9	3.2	.0	.0	1.0	.0	7.9	6.6
6	16.6	13.3	10.4	9.9	4.8	4.0	.0	.0	.5	.0	7.4	6.2
7	16.5	13.6	10.2	9.5	4.6	4.4	.0	.0	.4	.0	6.8	5.5
8	16.0	13.4	9.9	9.1	5.1	4.2	.1	.0	.9	.0	6.1	4.4
9	16.0	13.1	9.1	8.2	4.4	3.4	.4	.0	1.0	.0	6.7	4.9
10	16.6	12.8	8.7	7.7	4.0	3.0	.2	.0	1.7	.2	6.0	5.1
11	15.5	12.7	8.2	7.4	3.8	3.2	.4	.0	2.0	.4	5.8	4.7
12	15.3	12.7	7.8	7.2	3.3	2.2	.0	.0	2.2	.6	4.8	4.3
13	15.0	12.6	7.6	7.0	2.1	.9	.0	.0	2.4	.9	5.3	3.2
14	15.0	11.8	7.3	6.9	.2	.2	.0	.0	2.4	.7	5.2	3.4
15	14.7	11.7	7.0	6.3	.2	.0	.0	.0	2.4	.8	5.7	4.0
16	14.5	11.4	6.7	5.4	.1	.0	.0	.0	2.1	.9	5.6	4.5
17	14.3	11.3	5.5	4.5	1.0	.0	.0	.0	2.6	.8	5.9	3.7
18	13.8	11.2	4.5	3.8	1.3	.0	.3	.0	2.1	.9	5.9	3.9
19	13.2	11.5	4.3	3.4	2.4	1.7	.1	.0	2.6	.9	7.1	4.6
20	13.0	9.9	4.4	3.5	2.4	1.6	.0	.0	2.9	1.2	8.4	6.2
21	12.1	9.7	4.3	3.7	2.0	1.2	.0	.0	3.5	1.6	9.6	7.1
22	11.4	9.2	4.4	3.8	1.3	1.0	.0	.0	3.7	2.0	10.1	8.4
23	11.2	9.5	4.6	3.9	1.7	1.1	.0	.0	4.0	2.4	10.4	8.7
24	11.2	10.3	4.4	3.3	1.4	.1	.0	.0	4.2	2.6	9.6	8.4
25	11.2	9.2	3.9	3.0	.2	.1	.0	.0	4.6	3.0	10.1	7.9
26	13.2	11.2	4.1	3.3	.0	.0	.0	.0	5.4	3.4	11.3	9.2
27	13.2	10.9	3.4	2.5	.0	.0	.0	.0	5.3	4.1	11.5	9.1
28	11.2	11.2	3.0	2.2	.0	.0	.0	.0	6.3	4.9	10.1	7.4
29	13.3	11.5	3.7	2.2	.0	.0	.0	.0	7.5	5.8	7.6	6.4
30	14.2	10.4	2.6	1.6	.0	.0	.0	.0	---	---	6.8	5.1
31	11.8	9.0	---	---	.0	.0	.0	.0	---	---	7.2	5.1
MONTH	16.6	9.0	11.4	1.6	5.1	.0	.4	.0	7.5	.0	11.5	3.2

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	8.3	6.2	15.3	12.7	15.0	12.3	22.3	20.2	24.6	22.8	23.0	20.6
2	9.4	7.0	12.6	11.2	17.1	13.9	22.6	21.0	25.1	22.7	22.5	20.5
3	10.4	8.5	12.5	10.7	19.0	15.9	22.7	21.8	24.9	22.3	21.9	20.1
4	10.7	9.7	13.7	11.6	20.2	17.8	21.7	20.8	25.3	22.9	22.1	19.5
5	11.2	9.0	13.6	12.2	20.0	18.2	21.6	20.4	24.5	22.3	21.5	19.4
6	12.1	9.7	13.4	11.6	18.9	17.1	22.1	20.4	24.9	22.5	20.9	19.2
7	13.2	10.6	12.3	10.5	17.6	16.1	22.8	21.1	23.8	21.9	20.5	18.8
8	13.2	11.8	12.7	10.9	17.6	15.6	23.8	21.8	23.6	21.9	20.9	18.5
9	11.3	10.1	14.1	11.9	18.0	15.8	23.3	22.0	23.4	21.2	20.5	18.6
10	10.8	9.2	15.8	13.3	18.2	16.3	24.0	21.5	22.9	20.9	19.7	18.5
11	11.5	9.3	16.8	14.4	18.4	16.4	23.8	21.5	23.1	20.7	18.3	16.0
12	12.6	10.1	18.1	15.7	17.8	15.6	23.4	21.5	22.7	20.6	15.9	14.5
13	13.5	11.4	18.5	16.7	17.8	16.1	24.6	21.9	22.8	20.7	15.0	13.7
14	13.6	12.6	18.3	16.6	18.2	16.1	24.7	22.8	23.3	20.8	15.3	13.7
15	14.8	13.0	18.5	16.5	19.0	16.4	25.1	22.3	22.6	21.5	16.1	14.1
16	14.5	13.4	18.2	16.4	20.3	17.8	25.0	22.1	24.2	21.3	17.0	14.9
17	13.7	11.8	17.2	15.4	20.3	18.5	24.4	22.5	24.2	22.0	17.5	15.5
18	11.9	10.6	15.4	14.2	20.7	18.1	24.8	21.8	24.4	21.7	16.7	15.2
19	12.6	10.9	14.2	12.9	21.0	19.4	25.0	22.4	24.5	22.0	15.6	13.8
20	13.1	12.0	13.2	11.6	21.7	19.7	24.8	22.3	23.8	21.9	16.0	13.9
21	13.1	11.9	14.0	11.5	22.3	20.0	24.7	22.3	23.4	21.7	16.8	14.9
22	12.1	10.7	14.8	12.2	22.4	20.3	25.1	22.6	23.4	21.1	17.2	15.1
23	11.6	10.3	16.0	12.9	23.4	20.7	24.5	23.2	24.3	21.7	17.2	15.4
24	12.0	10.5	17.4	14.7	23.6	21.9	25.1	22.2	24.4	22.0	17.4	15.3
25	12.4	11.2	17.9	16.0	23.6	21.5	25.7	23.5	25.2	22.6	17.3	15.5
26	12.5	10.1	18.3	16.2	23.0	21.3	25.4	23.2	24.5	22.9	16.3	15.2
27	13.2	11.0	17.8	16.1	22.7	21.4	25.0	23.1	23.6	21.6	16.5	14.4
28	14.2	12.3	17.8	15.8	22.6	20.6	25.3	23.0	23.2	21.6	15.9	14.4
29	15.9	13.1	17.6	15.4	21.9	20.7	25.7	23.0	23.8	21.1	15.3	13.4
30	16.0	14.6	15.1	13.8	22.0	19.9	25.7	22.9	23.6	21.4	15.5	13.2
31	---	---	14.5	12.6	---	---	25.1	23.2	23.4	21.1	---	---
MONTH	16.0	6.2	18.5	10.5	23.6	12.3	25.7	20.2	25.3	20.6	23.0	13.2

YEAR MAXIMUM 25.7 MINIMUM .0

09163570 HAY PRESS CREEK ABOVE FRUITA RESERVOIR NO. 3, NEAR GLADE PARK, CO

LOCATION.--Lat 38°51'03", long 108°46'56", in NE¼SW¼ sec.1?, T.14 S., R.1?? W., Mesa County, Hydrologic Unit 14030001, on right bank, 10 mi southwest of Glade Park Post Office.

DRAINAGE AREA.--0.77 mi².

PERIOD OF RECORD.--April 1983 to March 1988 (discontinued).

GAGE.--Water-stage recorder. Elevation of gage is 8,885 ft above National Geodetic Vertical Datum of 1929, from topographic map. April 1, 1983 to August 23, 1984, water-stage recorder at site [illegible] ft upstream, at datum 5 ft, higher.

REMARKS.--Estimated daily discharges: Nov. [illegible] to Mar. [illegible]. Records fair except for estimated daily discharges, which are poor. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, [illegible] ft³/s, May [illegible], 198[illegible], gage height, [illegible] ft, from rating curve extended above 1.7 ft³/s; minimum daily, 0.01 ft³/s, Oct. [illegible], 19[illegible].

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period October to March, [illegible] ft³/s at [illegible], gage height, 0.56 ft, no peak greater than base discharge of [illegible] ft³/s; minimum daily discharge, [illegible] ft³/s, Oct. [illegible].

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	---	---	---	---	---	---
2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	---	---	---	---	---	---
3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	---	---	---	---	---	---
4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	---	---	---	---	---	---
5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	---	---	---	---	---	---
6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	---	---	---	---	---	---
7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	---	---	---	---	---	---
8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	---	---	---	---	---	---
9	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	---	---	---	---	---	---
10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	---	---	---	---	---	---
11	[illegible]	[illegible]	.04	[illegible]	[illegible]	[illegible]	---	---	---	---	---	---
12	[illegible]	[illegible]	.04	[illegible]	[illegible]	[illegible]	---	---	---	---	---	---
13	[illegible]	[illegible]	.04	[illegible]	[illegible]	[illegible]	---	---	---	---	---	---
14	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	---	---	---	---	---	---
15	.02	.02	.04	[illegible]	[illegible]	[illegible]	---	---	---	---	---	---
16	[illegible]	[illegible]	.05	[illegible]	[illegible]	[illegible]	---	---	---	---	---	---
17	.02	.02	.06	.04	[illegible]	[illegible]	---	---	---	---	---	---
18	[illegible]	[illegible]	.04	[illegible]	[illegible]	[illegible]	---	---	---	---	---	---
19	[illegible]	.02	.04	[illegible]	[illegible]	[illegible]	---	---	---	---	---	---
20	.02	[illegible]	.04	.05	[illegible]	[illegible]	---	---	---	---	---	---
21	[illegible]	[illegible]	.04	[illegible]	.04	[illegible]	---	---	---	---	---	---
22	[illegible]	.02	.04	.04	[illegible]	[illegible]	---	---	---	---	---	---
23	.02	[illegible]	.04	.04	.04	[illegible]	---	---	---	---	---	---
24	.02	.03	.04	[illegible]	[illegible]	[illegible]	---	---	---	---	---	---
25	.03	.03	.04	.04	.04	[illegible]	---	---	---	---	---	---
26	.02	.03	.04	.04	.04	[illegible]	---	---	---	---	---	---
27	.02	.03	.04	.04	.04	[illegible]	---	---	---	---	---	---
28	.02	.04	.04	.04	[illegible]	[illegible]	---	---	---	---	---	---
29	.02	.04	.04	.04	[illegible]	[illegible]	---	---	---	---	---	---
30	.03	.04	.04	.04	---	[illegible]	---	---	---	---	---	---
31	.03	---	.04	.04	---	[illegible]	---	---	---	---	---	---
TOTAL	0.53	0.93	1.29	1.22	1.28	1.44	---	---	---	---	---	---
MEAN	.017	.031	.042	.039	.044	[illegible]	---	---	---	---	---	---
MAX	.03	.06	.05	.05	.05	.07	---	---	---	---	---	---
MIN	.01	.02	.04	.03	.04	.04	---	---	---	---	---	---
AC-FT	1.1	1.8	2.6	2.4	2.5	2.9	---	---	---	---	---	---

CAL YR 1987 TOTAL 289.86 MEAN .79 MAX 9.6 MIN .01 AC-FT [illegible]

DOLORES RIVER BASIN

09165000 DOLORES RIVER BELOW RICO, CO

LOCATION.--Lat 37°38'29", long 108°03'35", Dolores County, Hydrologic Unit 14030002, on left bank at upstream side of Montelores bridge northwest of State Highway 145 (relocated), at Dolores-Montezuma County line, [illegible] mi upstream from Ryman Creek, and 4.0 mi southwest of Rico.

DRAINAGE AREA.--105 mi².

PERIOD OF RECORD.--October 1951 to current year.

GAGE.--Water-stage recorder. Datum of gage is 8,4[illegible].22 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Oct. 1-5, 7, Nov. 17-21, Nov. 25 to Dec. 5, Dec. 7-10, Dec. 13 to [illegible], and Mar. [illegible]. Records good except for estimated daily discharges, which are poor. No diversion [illegible] from station. Several observations of specific conductance and water temperature were obtained and [illegible] in this report.

AVERAGE DISCHARGE.--[illegible] years, [illegible] ft³/s, [illegible] acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, [illegible] ft³/s, May [illegible], 1984, gage height, 5.95 ft; from rating [illegible] ft³/s; maximum gage height, [illegible] ft, June 19, 1952; minimum daily discharge, [illegible].

EXTREMES OUTSIDE PERIOD OF RECORD.--[illegible] occurred Oct. 5, 1911.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of [illegible] ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
[illegible]	[illegible]	*[illegible]	*[illegible]				

Minimum daily, [illegible].

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	122	[illegible]
2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	168	96	75
3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	77	66
4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	63
5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	144	57	59
6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	76	52
7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	119	128	45
8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	88	45
9	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	147	[illegible]	[illegible]	67	43
10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	63	44
11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	117	55	63
12	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	433	97	59	219
13	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	92	52	207
14	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	83	48	144
15	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	47	114
16	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	75	56	97
17	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	73	71	88
18	[illegible]	[illegible]	[illegible]	[illegible]	17	[illegible]	[illegible]	655	311	67	57	81
19	[illegible]	[illegible]	[illegible]	[illegible]	17	[illegible]	[illegible]	[illegible]	299	63	50	74
20	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	59	46	69
21	[illegible]	42	[illegible]	19	18	33	123	316	263	59	45	139
22	[illegible]	42	[illegible]	19	19	42	115	293	231	55	58	113
23	34	39	22	19	20	46	104	322	230	54	52	91
24	34	38	22	18	20	47	96	370	251	53	54	80
25	47	38	22	18	22	47	94	387	233	51	57	71
26	44	36	22	18	24	60	99	359	208	52	60	66
27	43	36	20	18	28	75	106	403	203	54	158	70
28	43	36	20	18	32	81	119	490	256	63	91	67
29	46	36	20	18	34	66	127	519	236	65	84	58
30	53	34	20	18	---	59	169	489	198	60	95	55
31	49	---	20	17	---	51	---	356	---	60	97	---
TOTAL	1161	1485	760	581	552	1132	3561	10787	10582	2839	2216	2564
MEAN	37.5	49.5	24.5	18.7	19.0	36.5	119	348	353	91.6	71.5	85.5
MAX	58	114	34	20	34	81	192	655	643	179	158	219
MIN	29	34	20	17	15	22	47	141	198	51	45	43
AC-FT	2300	2950	1510	1150	1090	2250	7060	21400	20990	5630	4400	5090

CAL YR 1987 TOTAL 61470 MEAN 168 MAX 1050 MIN 20 AC-FT 121900
WTR YR 1988 TOTAL 38220 MEAN 104 MAX 655 MIN 15 AC-FT 75810

09166500 DOLORES RIVER AT DOLORES, CO

LOCATION.--Lat 37°28'21", long 108°29'49", in SW¼SW¼ sec.10, T.37 N., R.15 W., Montezuma County, Hydrologic Unit 14030002, on left bank 0.25 mi upstream from bridge on State Highway 184 in Dolores and 0.8 mi upstream from Lost Canyon Creek.

DRAINAGE AREA.--504 mi².

PERIOD OF RECORD.--June 1895 to October 1903, August 1910 to November 1912, October 1921 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 859: 1937. WRD Colo. 1972: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 6,940 ft above National Geodetic Vertical Datum of 1929, from topographic map. See WSP 1713 or 1733 for history of changes prior to Oct. 7, 1952. Oct. 7, 1952 to Nov. 16, 1983, at site 0.4 mi downstream at different datum.

REMARKS.--Estimated daily discharges: Nov. 14, 15, 18, 20-24, 26, Nov. 29 to Mar. 7, 10, 13-16, 18-20. Records good except for estimated daily discharges, which are poor. Diversions for irrigation of about 3,000 acres upstream from station. Flow partly regulated by Groundhog Reservoir, capacity, 21,710 acre-ft. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--77 years (water years 1896-1903, 1911-12, 1922-88), 440 ft³/s; 318,800 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,000 ft³/s, Oct. 5, 1911, gage height, 10.0 ft, site and datum then in use, from rating curve extended above 2,800 ft³/s; minimum daily, 3.5 ft³/s, Aug. 15, 1934.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1885, that of Oct. 5, 1911.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,900 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
May 18	0500	*2,410	*5.96	No other peak greater than base discharge			

Minimum daily, 60 ft³/s, Dec. 27.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	84	150	80	75	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
2	82	284	75	75	85	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
3	80	136	80	70	85	[illegible]	[illegible]	735	429	354	254	[illegible]
4	75	172	80	70	85	[illegible]	[illegible]	[illegible]	1190	[illegible]	[illegible]	[illegible]
5	76	162	80	75	75	90	353	794	1300	397	197	[illegible]
6	72	272	80	75	75	[illegible]	374	845	1410	333	[illegible]	318
7	70	275	75	75	80	90	462	775	1410	302	[illegible]	297
8	70	214	75	70	80	87	526	636	1250	292	239	[illegible]
9	69	190	70	70	80	83	640	615	1110	277	224	182
10	69	180	70	70	80	90	560	687	1030	313	199	177
11	70	161	70	70	80	89	571	922	1130	346	183	[illegible]
12	71	148	70	70	75	75	597	1210	957	372	184	357
13	85	142	70	70	75	75	872	1470	844	242	136	504
14	157	130	65	70	75	70	827	1610	662	252	172	[illegible]
15	150	130	65	75	75	75	884	1340	604	245	165	334
16	118	113	65	75	75	75	907	1940	611	253	175	294
17	104	98	65	75	75	72	791	1980	595	240	225	[illegible]
18	98	95	75	70	75	70	635	2240	604	233	206	[illegible]
19	93	95	70	75	80	75	608	1870	640	219	154	[illegible]
20	89	100	65	75	80	85	616	1430	593	204	177	[illegible]
21	84	95	65	75	80	102	625	1120	562	199	[illegible]	[illegible]
22	80	95	65	75	80	134	584	1010	501	193	198	252
23	84	90	70	75	80	163	532	1030	498	188	196	[illegible]
24	92	90	75	75	80	179	503	1130	503	186	186	193
25	133	93	75	70	85	169	536	1150	543	186	234	175
26	150	90	70	70	85	210	639	1050	489	183	223	163
27	124	86	60	75	90	279	658	1110	438	176	459	156
28	113	82	65	75	90	343	725	1300	585	179	346	163
29	114	90	65	75	95	256	792	1330	555	194	352	143
30	173	85	65	75	---	256	909	1340	461	183	353	132
31	161	---	70	75	---	213	---	1010	---	193	360	---
TOTAL	3098	4113	2190	2250	2315	3990	17613	36826	23697	8131	7430	7493
MEAN	99.9	137	70.6	72.6	79.8	129	587	1188	790	262	240	250
MAX	173	275	80	75	95	343	909	2240	1430	509	459	504
MIN	69	82	60	70	75	70	174	610	438	176	166	132
AC-FT	6140	8160	4340	4460	4590	7910	34940	73040	47000	16130	14740	14860

CAL YR 1987 TOTAL 217260 MEAN 595 MAX 3420 MIN 60 AC-FT 430900
WTR YR 1988 TOTAL 119146 MEAN 326 MAX 2240 MIN 60 AC-FT 236300

09166950 LOST CANYON CREEK NEAR DOLORES, CO

LOCATION.--Lat 37°26'46", long 108°28'37", in SE¼NE¼ sec.23, T.37N., R.15W., Montezuma County, Hydrologic Unit 14030002, on right bank 1 mi upstream from mouth, and 2.5 mi southeast of Dolores.

DRAINAGE AREA.--71.3 mi².

PERIOD OF RECORD.--April 1984 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 7,130 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 19-24, Dec. 4-15, Jan. 11, 18, Jan. 21 to Feb. 4, Feb. 10, 12-23, Feb. 25 to Mar. 16, and Aug 24, 25. Records good except for estimated daily discharges, which are poor. Several small storage reservoirs and diversions for irrigation of about 4,750 acres in the San Juan River basin and one diversion for irrigation of about 11 acres in Lost Canyon in the Dolores River basin. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 744 ft³/s, Apr. 7, 1986, gage height, 7.21 ft; no flow many days each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 149 ft³/s at 1130 Apr. 9, gage height, 4.71 ft; no flow many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	[illegible]	[illegible]	1.1	[illegible]	.95	1.1	[illegible]	[illegible]	1.1	1.1	4.9	1.3
2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.74	[illegible]	4.4	1.7
3	[illegible]	[illegible]	[illegible]	.41	[illegible]	[illegible]	[illegible]	[illegible]	.87	.98	4.2	1.5
4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
5	[illegible]	[illegible]	[illegible]	[illegible]	.94	[illegible]	[illegible]	[illegible]	.57	[illegible]	[illegible]	[illegible]
6	[illegible]	[illegible]	[illegible]	[illegible]	.94	[illegible]	[illegible]	[illegible]	[illegible]	.78	[illegible]	[illegible]
7	[illegible]	[illegible]	[illegible]	[illegible]	.94	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
8	[illegible]	[illegible]	[illegible]	[illegible]	.94	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
9	[illegible]	[illegible]	[illegible]	[illegible]	.94	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.88
10	[illegible]	[illegible]	[illegible]	[illegible]	1.1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
11	[illegible]	[illegible]	[illegible]	.71	1.1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
12	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
13	[illegible]	1.6	.89	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.95	[illegible]	1.6	[illegible]
14	[illegible]	2.2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.74	[illegible]	[illegible]	[illegible]
15	[illegible]	[illegible]	[illegible]	.53	[illegible]	[illegible]	[illegible]	[illegible]	.58	[illegible]	[illegible]	[illegible]
16	[illegible]	[illegible]	.59	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.4	[illegible]
17	.53	1.3	[illegible]	[illegible]	[illegible]	[illegible]	78	[illegible]	[illegible]	[illegible]	1.8	[illegible]
18	.33	[illegible]	1.1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	3.4
19	[illegible]	1.3	1.1	.94	[illegible]	1.4	[illegible]	[illegible]	[illegible]	[illegible]	1.3	3.8
20	.33	1.5	1.1	.94	.95	2.6	[illegible]	[illegible]	[illegible]	[illegible]	.68	7.5
21	.33	1.6	.94	.94	1.3	4.9	[illegible]	[illegible]	[illegible]	.31	.41	[illegible]
22	[illegible]	[illegible]	1.1	[illegible]	1.3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.54	[illegible]
23	[illegible]	[illegible]	1.1	[illegible]	.93	[illegible]	[illegible]	[illegible]	[illegible]	.48	[illegible]	[illegible]
24	[illegible]	1.6	.94	[illegible]	.94	[illegible]	[illegible]	[illegible]	[illegible]	.83	[illegible]	[illegible]
25	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.16	1.4	.26	[illegible]
26	[illegible]	[illegible]	[illegible]	.68	1.6	29	56	[illegible]	[illegible]	1.7	[illegible]	[illegible]
27	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
28	[illegible]	[illegible]	.68	.94	1.1	46	[illegible]	[illegible]	2.4	2.4	[illegible]	[illegible]
29	[illegible]	[illegible]	[illegible]	.94	1.1	44	[illegible]	.62	[illegible]	[illegible]	[illegible]	[illegible]
30	[illegible]	[illegible]	[illegible]	[illegible]	---	[illegible]	[illegible]	.74	[illegible]	[illegible]	[illegible]	[illegible]
31	[illegible]	---	[illegible]	[illegible]	---	[illegible]	---	[illegible]	---	[illegible]	.49	---
TOTAL	[illegible]	[illegible]	[illegible]	24.12	[illegible]	[illegible]	[illegible]	936.56	25.84	25.75	[illegible]	158.66
MEAN	[illegible]	[illegible]	[illegible]	.78	.99	[illegible]	50.9	[illegible]	.86	[illegible]	1.62	[illegible]
MAX	[illegible]	[illegible]	[illegible]	.95	1.6	48	[illegible]	[illegible]	[illegible]	4.9	[illegible]	12
MIN	[illegible]	[illegible]	.68	.41	[illegible]	[illegible]	11	.62	.16	[illegible]	[illegible]	[illegible]
AC-FT	[illegible]	[illegible]	56	48	57	621	3230	[illegible]	[illegible]	51	99	337

CAL YR 1987 TOTAL 14823.45 MEAN 40.6 MAX 471 MIN .33 AC-FT 29410
WTR YR 1988 TOTAL 3329.38 MEAN 9.09 MAX 119 MIN .33 AC-FT 6600

09169500 DOLORES RIVER AT BEDROCK, CO

LOCATION.--Lat 38°18'37", long 108°53'05", in NW¼SW¼ sec.20, T.47 N., R.18 W., Montrose County, Hydrologic Unit 14030002, on right bank at upstream side of bridge, 0.4 mi southeast of Bedrock, and 3.1 mi upstream from East Paradox Creek.

DRAINAGE AREA.--2,024 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1917 to September 1922 (monthly discharge only for some periods, published in WSP 1313). August 1971 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 4,940 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Aug. 1, 1971, nonrecording gage at different datum.

REMARKS.--Estimated daily discharges: Nov. 19, Nov. 29 to Dec. 5, Dec. 13-16, 21, 22, and Dec. 24 to Feb. 19. Records good except for estimated daily discharges, which are poor. Diversions upstream from station for irrigation of about 5,000 acres upstream from station, and about 74,760 acres in the San Juan River basin. Flow regulated since March 19, 1984, by McPhee Reservoir, capacity 381,000 acre-ft.

AVERAGE DISCHARGE.--17 years (water years 1918-22, 1972-83), 497 ft³/s; 360,100 acre-ft/yr, prior to completion of McPhee Reservoir. 5 years (water years 1984-1988), 522 ft³/s; 378,200 acre-ft/yr, subsequent to completion of McPhee Reservoir.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,280 ft³/s, Apr. 30, 1973, gage height, 12.64 ft, from floodmarks, from rating curve extended above 3,700 ft³/s; no flow, Sept. 13, 1974, Aug. 15 to 18, 1978.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Sept. 6, 1970, reached a stage of 7.15 ft, present datum, from floodmarks (discharge not determined).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,340 ft³/s at 0500 Nov. 6, gage height, 6.72 ft; minimum daily, 54 ft³/s, Oct. 1.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	54	113	95	95	113	232	246	432	669	114	241	391
2	74	136	97	60	115	211	194	495	653	90	164	127
3	77	114	100	65	121	174	174	524	653	97	125	90
4	77	113	110	75	100	160	246	1170	646	113	77	85
5	77	107	110	80	100	152	338	1200	646	161	69	74
6	77	890	126	85	115	143	337	1220	640	111	59	74
7	77	395	109	85	113	144	325	1230	614	90	58	72
8	77	223	104	85	115	140	392	1220	631	83	64	73
9	79	156	109	85	113	148	356	1240	594	78	64	73
10	77	133	101	90	100	122	329	985	434	74	61	72
11	79	122	100	95	110	117	266	623	276	74	59	79
12	79	118	95	95	115	117	231	299	243	74	64	137
13	93	112	75	90	110	106	218	263	235	73	65	569
14	93	110	85	95	110	101	217	260	223	66	61	310
15	116	114	65	93	110	100	237	267	321	65	60	135
16	104	112	73	90	110	100	365	272	264	63	66	99
17	96	109	114	80	110	100	350	283	193	63	193	89
18	83	101	117	80	110	97	423	317	143	63	115	83
19	86	99	125	80	110	94	332	463	133	65	77	79
20	84	103	115	80	115	91	283	1160	90	62	68	77
21	83	107	100	80	115	94	307	1230	86	61	351	75
22	83	104	100	80	115	100	268	1030	80	60	134	77
23	84	103	101	75	129	153	292	834	79	60	80	93
24	87	104	95	85	138	260	327	630	76	60	77	73
25	94	104	75	90	138	314	379	666	76	60	75	76
26	94	107	73	85	160	298	433	662	83	61	76	75
27	93	107	75	90	174	402	402	658	76	65	80	74
28	87	100	75	90	244	637	302	646	161	65	121	75
29	89	85	80	100	267	591	251	702	157	66	111	75
30	102	80	85	110	---	358	274	875	146	72	90	74
31	104	---	90	110	---	294	---	802	---	149	98	---
TOTAL	2655	4481	2931	2635	3644	6146	9064	22258	9319	2475	3106	3480
MEAN	85.6	149	94.5	85.0	126	198	302	718	311	79.8	100	116
MAX	116	890	126	110	267	637	433	1240	669	161	351	569
MIN	54	80	65	60	100	91	174	260	76	60	59	70
AC-FT	5270	8890	5810	5230	7230	12190	17980	44150	18480	4910	6160	6900

CAL YR 1987 TOTAL 216320 MEAN 593 MAX 3550 MIN 50 AC-FT 429100
WTR YR 1988 TOTAL 72194 MEAN 197 MAX 1240 MIN 54 AC-FT 143200

DOLORES RIVER BASIN

[illegible] DOLORES RIVER AT BEDROCK, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1979 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: November 1979 to current year.
WATER TEMPERATURES: November 1979 to current year.

INSTRUMENTATION.--Water-quality monitor since November [illegible].

REMARKS.--Daily maximum and minimum specific-conductance data available in district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, [illegible] microsiemens Aug. 14, [illegible]; minimum, [illegible] microsiemens May 25, 1983.
WATER TEMPERATURES: Maximum, 33.5°C Aug. 7, 1981; minimum, [illegible]°C Dec. 3-8, 1987.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum recorded, [illegible] microsiemens July [illegible]; minimum recorded, 160 microsiemens May 26 (may have been less during periods of missing record in May and June).
WATER TEMPERATURES: Maximum recorded, [illegible]°C July [illegible]; minimum recorded, 0.0°C many days during winter months.

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO
OCT [illegible]...	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2
NOV [illegible]...	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	50	[illegible]
JAN [illegible]...	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MAR [illegible]...	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MAY [illegible]...	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]...	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
JUN [illegible]...	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	3.6
[illegible]...	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2
AUG [illegible]...	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	35	7.4	[illegible]	[illegible]
SEP [illegible]...	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2
[illegible]...	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	67	[illegible]	58	[illegible]

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)
OCT [illegible]...	[illegible]	[illegible]	[illegible]	96	[illegible]	[illegible]	446	0.61	[illegible]	<0.10
NOV [illegible]...	[illegible]	[illegible]	[illegible]	94	[illegible]	5.1	500	0.68	[illegible]	<0.10
JAN [illegible]...	[illegible]	[illegible]	[illegible]	96	0.20	5.4	[illegible]	0.60	[illegible]	<0.10
MAR [illegible]...	[illegible]	[illegible]	[illegible]	[illegible]	0.20	5.1	502	0.68	343	0.12
MAY [illegible]...	1.8	[illegible]	72	14	0.20	5.2	239	0.32	397	0.10
[illegible]...	1.9	112	74	15	0.20	5.0	242	0.33	440	<0.10
JUN [illegible]...	1.8	109	56	12	0.20	4.4	211	0.29	[illegible]	<0.10
[illegible]...	1.9	124	93	96	0.20	2.8	404	0.55	311	<0.10
AUG [illegible]...	4.2	140	49	31	0.30	5.2	251	0.34	[illegible]	[illegible]
SEP [illegible]...	3.7	106	190	73	0.20	4.4	513	0.70	109	<0.10
[illegible]...	3.6	127	180	80	0.20	4.2	500	0.68	105	<0.100

09169500 DOLORES RIVER AT BEDROCK, CO--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	798	622	938	901	721	861	653	712	---	507	495	1260
2	797	745	989	1060	744	1110	675	660	---	751	477	1080
3	745	629	876	1070	997	1310	741	731	---	735	561	983
4	797	609	887	992	966	1280	752	---	---	782	457	964
5	769	631	834	928	1030	1210	694	---	---	753	573	987
6	662	469	877	914	1090	1190	634	---	---	719	876	1010
7	624	527	874	775	1020	1110	616	---	---	600	941	1020
8	617	626	870	702	940	1090	591	---	---	2020	959	990
9	602	652	825	740	906	1060	573	---	---	1740	928	967
10	601	675	926	753	911	1060	590	---	314	1240	749	939
11	596	698	941	782	905	1070	637	547	378	1060	704	886
12	596	718	991	823	902	1010	657	417	433	933	649	807
13	606	742	966	873	960	958	727	475	489	879	664	613
14	623	762	906	903	1040	997	768	544	496	815	583	796
15	677	785	951	922	966	1050	782	558	510	741	590	1020
16	570	796	1020	916	1030	978	787	551	---	774	576	959
17	574	797	879	857	1140	1080	676	532	---	694	555	936
18	583	799	805	869	1290	1030	638	541	---	678	541	926
19	649	880	791	813	1090	1060	616	541	---	631	584	898
20	821	905	738	829	1160	1050	652	398	---	616	674	874
21	954	911	720	861	1130	1060	701	382	---	612	664	854
22	900	883	733	872	1080	1010	727	382	---	613	468	851
23	720	851	777	969	1000	951	712	384	---	637	520	776
24	659	843	840	908	900	987	757	299	---	600	541	731
25	646	832	870	940	990	925	713	185	---	604	535	708
26	652	854	824	944	1050	717	655	214	---	593	520	685
27	610	879	831	878	1040	633	595	192	---	604	509	691
28	620	962	1030	841	892	572	601	---	---	592	496	682
29	627	831	951	786	825	503	672	---	611	572	488	683
30	663	916	958	748	---	535	710	---	491	695	487	667
31	701	---	926	718	---	560	---	---	---	627	1730	---
MEAN	679	759	879	867	990	968	677	---	---	791	648	875

09169500 DOLORES RIVER AT BEDROCK, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	15.6	11.9	10.3	9.0	.3	.0	.2	.0	.1	.0	7.8	4.5
2	16.7	11.9	10.3	9.2	.3	.0	.4	.0	.1	.0	8.0	4.7
3	16.7	11.8	10.8	9.1	.9	.1	.2	.0	.1	.0	7.5	4.7
4	16.0	11.7	11.0	8.2	.4	.1	.2	.0	.1	.0	7.2	4.3
5	16.4	11.7	9.9	7.8	1.2	.2	.1	.0	.1	.0	7.5	4.1
6	16.6	11.8	9.2	8.9	2.0	.6	.1	.0	.1	.0	7.5	4.4
7	16.2	11.7	8.9	8.2	1.9	1.2	.1	.0	.1	.0	7.4	4.8
8	15.4	11.8	8.8	7.2	2.5	.5	.1	.0	.1	.0	6.7	2.7
9	15.4	11.5	8.0	6.3	1.6	.1	.1	.0	.1	.0	7.3	3.2
10	15.6	11.5	7.3	5.9	2.0	.1	.1	.0	.2	.0	6.1	4.2
11	15.7	11.0	7.3	5.4	2.0	.1	.1	.0	.2	.0	6.0	3.5
12	14.0	11.7	6.5	5.1	.6	.1	.2	.0	.2	.0	4.9	2.3
13	13.2	12.0	6.4	4.9	.2	.0	.2	.0	.2	.0	6.0	2.5
14	11.9	11.2	6.4	5.5	.2	.0	.2	.0	.2	.0	5.8	1.6
15	12.8	10.5	6.0	3.6	.3	.0	.2	.1	.2	.0	5.7	3.5
16	13.6	10.2	4.6	2.7	.2	.1	.1	.0	.2	.0	7.2	4.4
17	13.3	9.3	3.3	1.5	.4	.0	.1	.0	.3	.0	6.7	3.3
18	12.9	9.0	2.7	.6	.3	.0	.1	.0	.2	.0	7.4	[illegible]
19	12.7	8.6	2.4	.1	.2	.0	.2	.0	.2	.0	8.8	4.3
20	12.7	7.9	2.5	.1	.6	.0	.2	.0	.6	.1	10.1	5.5
21	11.4	7.3	1.8	.1	.4	.0	.2	.0	1.5	.1	10.8	6.8
22	11.9	7.4	3.1	.4	.7	.1	.2	.0	2.2	.1	10.7	7.2
23	11.1	8.1	2.9	.5	.7	.0	.2	.0	2.4	.2	10.3	6.9
24	10.1	8.9	2.7	.5	.3	.1	.2	.0	2.9	.3	10.3	6.8
25	12.7	9.5	1.7	.1	.3	.0	.2	.0	3.2	.3	10.3	6.0
26	12.4	8.6	2.0	1.0	.2	.1	.2	.0	3.2	.3	11.4	6.8
27	12.3	8.5	2.1	.1	.2	.0	.2	.0	2.3	.3	11.7	8.0
28	10.9	8.7	.5	.1	.2	.0	.2	.0	3.3	.6	9.6	5.8
29	10.5	9.2	.3	.0	.2	.0	.1	.0	5.5	.7	7.7	4.0
30	10.2	9.1	.4	.0	.2	.0	.1	.0	---	---	6.1	4.9
31	9.3	8.0	---	---	.1	.0	.1	.0	---	---	5.6	4.3
MONTH	16.7	7.3	11.0	.0	2.5	.0	.4	.0	5.5	.0	11.7	1.6

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	9.7	4.5	13.2	10.7	14.8	11.1	24.1	19.2	26.2	22.4	23.2	19.7
2	11.7	5.3	13.6	8.8	17.0	12.6	24.5	19.8	24.7	21.0	22.5	17.2
3	12.0	7.2	15.8	9.7	18.9	14.9	25.3	20.3	26.1	20.5	23.0	17.3
4	12.2	8.9	12.9	11.7	19.9	16.2	23.4	19.5	26.1	20.7	24.0	17.3
5	14.2	8.7	12.0	11.0	19.8	17.2	24.4	19.8	25.4	18.9	23.9	17.5
6	15.2	9.5	12.0	11.3	19.6	16.7	26.9	20.1	27.1	21.0	24.0	17.2
7	15.9	10.5	11.3	10.5	19.3	15.8	27.7	20.7	25.8	21.4	22.8	17.2
8	14.5	11.8	11.3	10.3	19.5	15.6	27.0	21.8	25.1	19.1	24.3	16.9
9	13.6	9.3	12.1	11.1	20.6	16.4	25.1	21.6	25.2	18.6	23.0	17.0
10	13.4	8.3	13.2	11.9	20.1	17.0	27.2	20.3	22.7	18.8	20.7	17.2
11	14.6	8.7	17.1	13.0	20.6	17.0	27.1	21.2	24.7	17.8	19.4	15.3
12	15.9	9.8	19.6	13.1	21.9	16.7	28.0	21.5	24.1	19.0	16.4	12.6
13	15.2	10.9	20.2	14.7	20.7	17.8	29.2	21.3	24.5	18.7	16.7	11.9
14	14.4	11.8	21.2	15.8	22.2	16.2	27.6	22.5	24.9	18.3	17.5	12.5
15	15.6	11.6	22.1	16.3	20.9	17.4	26.8	22.5	23.4	19.7	18.6	12.3
16	14.4	11.5	21.7	17.1	---	---	27.5	21.0	23.5	19.6	19.8	13.1
17	12.8	9.9	19.7	17.5	---	---	26.2	22.1	24.6	19.1	20.3	14.0
18	12.6	10.0	18.1	16.2	---	---	27.6	20.7	24.5	19.5	20.7	14.9
19	13.6	9.6	17.2	14.9	---	---	27.9	20.4	24.9	18.6	18.3	11.4
20	13.6	9.9	14.7	13.6	---	---	28.4	21.3	24.6	19.9	18.6	11.7
21	11.9	10.0	13.7	12.8	---	---	28.6	20.8	21.5	17.2	19.5	14.9
22	9.9	8.2	14.6	12.8	---	---	28.3	21.7	24.7	17.6	19.8	---
23	10.5	7.4	15.7	13.3	---	---	26.0	21.2	27.0	19.4	---	---
24	12.2	8.7	18.1	14.1	---	---	26.7	21.5	27.4	21.0	20.2	12.9
25	13.0	9.1	17.2	14.9	---	---	27.7	21.2	26.4	21.3	20.4	13.8
26	14.1	9.1	18.5	15.2	---	---	27.3	21.7	26.5	20.6	18.3	13.7
27	15.2	9.8	18.3	15.2	---	---	27.2	22.3	26.3	19.9	19.8	13.9
28	15.0	11.1	---	15.2	---	---	28.7	22.2	25.0	19.8	18.5	13.2
29	16.6	11.5	17.4	15.2	21.5	20.1	29.4	22.5	26.2	19.5	17.5	10.8
30	15.9	12.0	15.0	13.3	24.4	18.5	28.3	22.9	25.7	20.0	18.6	11.4
31	---	---	14.3	11.8	---	---	27.9	22.2	24.6	19.0	---	---
MONTH	16.6	4.5	---	8.8	---	---	29.4	19.2	27.4	17.2	---	---

09170800 WEST PARADOX CREEK ABOVE BEDROCK, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 38°19'54", long 108°53'59", in NE¼NW¼ sec.18, T.47 N., R.18 W., Montrose County, Hydrologic Unit 14030002. Site is 1,000 ft downstream from former surface water station and 1.3 mi northwest of Bedrock, 2.6 mi upstream from mouth.

DRAINAGE AREA.--53.3 mi²

PERIOD OF RECORD.--Chemical analyses: August 1987 to current year.

REMARKS.--Natural flow affected by water imported from Roc Creek through Buckeye Reservoir. Diversion for irrigation of about 2,500 acres.

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO
OCT										
05...	0930	968	8.3	10.0	510	300	110	57	26	0.5
NOV										
17...	1050	1210	7.1	3.0	550	330	110	68	31	0.6
JAN										
13...	1130	1010	8.4	0.0	580	340	120	67	31	0.6
MAR										
01...	1100	1040	7.2	6.0	520	340	120	54	25	0.5
MAY										
11...	1120	1310	7.7	13.0	710	470	140	88	49	0.8
24...	1120	834	7.6	14.5	450	270	93	53	27	0.6
JUN										
09...	1215	700	8.0	15.5	350	190	76	38	19	0.5
28...	1120	1500	7.6	19.0	730	540	150	98	46	0.7
SEP										
21...	1710	1520	8.2	17.5	760	530	150	93	49	0.8
22...	0730	1110	8.3	12.0	540	330	110	65	33	0.6

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)
OCT										
05...	5.0	210	310	21	0.30	9.7	667	0.91	0.0	0.53
NOV										
17...	3.2	222	390	24	0.30	12	775	1.05	0.0	0.72
JAN										
13...	3.3	236	340	23	0.40	12	742	1.01	0.0	0.86
MAR										
01...	3.7	181	350	20	0.30	11	695	0.94	0.0	0.45
MAY										
11...	5.1	240	520	44	0.40	8.1	1000	1.36	0.0	0.45
24...	3.2	183	280	23	0.30	9.5	599	0.81	0.0	<0.10
JUN										
09...	3.1	152	210	15	0.40	9.5	466	0.63	0.0	0.98
28...	4.1	243	580	41	0.30	11	1080	1.47	0.0	1.00
SEP										
21...	4.7	229	580	49	0.40	10	1080	1.46	0.0	0.38
22...	3.7	217	350	28	0.30	11	733	1.0	0.0	0.49

09171070 DOLORES RIVER BELOW WEST PARADOX CREEK NEAR BEDROCK, CO

WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 1979 to November 1987 (discontinued).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: December 1979 to Dec. 1, 1987.
WATER TEMPERATURES: December 1979 to Dec. 1, 1987.

INSTRUMENTATION.--Water-quality monitor since December 1979.

REMARKS.--Daily maximum and minimum specific-conductance data available in district office. Previously published as 09171100, Dolores River near Bedrock, Co.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 83,300 microsiemens Aug. 9, 1981; minimum, 103 microsiemens June 4, 1984.
WATER TEMPERATURES: Maximum, 33.5°C July 10, 1981; minimum, -1.5°C several days during November to January 1981 and 1983.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum recorded, 6,840 microsiemens Oct. 10 (but was exceeded during Oct. 1-5, Oct. 11-15, and Nov. 29 to Dec. 2 when specific conductance exceeded limits of monitor); minimum recorded, 1,820 microsiemens Nov. 6.
WATER TEMPERATURES: Maximum, 22.2°C Oct. 3; minimum, 0.0°C several days during November.

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (US/CM)	PH (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	HARDNESS TOTAL (MG/L AS CACO3)	HARDNESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM ADSORPTION RATIO
OCT											
05...	1200	93	7040	8.3	14.0	360	220	76	41	1300	31
NOV											
17...	1300	113	5040	7.2	4.0	380	240	84	41	950	22

DATE	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY LAB (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)
OCT										
05...	5.7	139	220	1900	0.20	1.7	3630	4.93	911	<0.10
NOV										
17...	40	143	240	1500	0.20	28	2970	4.04	946	<0.10

09171070 DOLORES RIVER BELOW WEST PARADOX CREEK NEAR BEDROCK, CO--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	4100	---	---	---	---	---	---	---	---	---	---
2	---	3050	---	---	---	---	---	---	---	---	---	---
3	---	3770	---	---	---	---	---	---	---	---	---	---
4	---	3690	---	---	---	---	---	---	---	---	---	---
5	---	4050	---	---	---	---	---	---	---	---	---	---
6	6200	2400	---	---	---	---	---	---	---	---	---	---
7	6130	1920	---	---	---	---	---	---	---	---	---	---
8	6190	2170	---	---	---	---	---	---	---	---	---	---
9	5110	2900	---	---	---	---	---	---	---	---	---	---
10	6370	3560	---	---	---	---	---	---	---	---	---	---
11	---	3930	---	---	---	---	---	---	---	---	---	---
12	---	4210	---	---	---	---	---	---	---	---	---	---
13	---	4520	---	---	---	---	---	---	---	---	---	---
14	---	4880	---	---	---	---	---	---	---	---	---	---
15	---	5030	---	---	---	---	---	---	---	---	---	---
16	4250	5120	---	---	---	---	---	---	---	---	---	---
17	4680	5050	---	---	---	---	---	---	---	---	---	---
18	5760	4940	---	---	---	---	---	---	---	---	---	---
19	5650	4790	---	---	---	---	---	---	---	---	---	---
20	5650	4880	---	---	---	---	---	---	---	---	---	---
21	5800	4720	---	---	---	---	---	---	---	---	---	---
22	5920	4390	---	---	---	---	---	---	---	---	---	---
23	5680	4310	---	---	---	---	---	---	---	---	---	---
24	5490	4090	---	---	---	---	---	---	---	---	---	---
25	4850	4190	---	---	---	---	---	---	---	---	---	---
26	4890	3850	---	---	---	---	---	---	---	---	---	---
27	4810	3640	---	---	---	---	---	---	---	---	---	---
28	5230	4200	---	---	---	---	---	---	---	---	---	---
29	5480	---	---	---	---	---	---	---	---	---	---	---
30	4770	---	---	---	---	---	---	---	---	---	---	---
31	4340	---	---	---	---	---	---	---	---	---	---	---

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	21.9	10.5	11.7	9.2	1.6	.0	---	---	---	---	---	---
2	21.9	11.0	12.0	9.3	---	---	---	---	---	---	---	---
3	22.2	11.3	12.7	8.8	---	---	---	---	---	---	---	---
4	21.4	11.2	13.4	7.4	---	---	---	---	---	---	---	---
5	17.1	11.5	11.5	6.9	---	---	---	---	---	---	---	---
6	17.8	9.4	9.9	8.5	---	---	---	---	---	---	---	---
7	17.3	9.2	10.0	8.0	---	---	---	---	---	---	---	---
8	16.3	9.8	10.5	6.9	---	---	---	---	---	---	---	---
9	16.9	9.2	9.8	5.4	---	---	---	---	---	---	---	---
10	16.7	9.6	9.0	4.7	---	---	---	---	---	---	---	---
11	17.5	8.9	9.2	4.4	---	---	---	---	---	---	---	---
12	14.4	10.2	8.2	3.6	---	---	---	---	---	---	---	---
13	12.7	11.1	8.2	3.2	---	---	---	---	---	---	---	---
14	11.8	10.5	7.4	5.7	---	---	---	---	---	---	---	---
15	15.0	10.0	7.6	3.2	---	---	---	---	---	---	---	---
16	15.6	8.4	6.3	1.7	---	---	---	---	---	---	---	---
17	15.4	7.7	3.7	.7	---	---	---	---	---	---	---	---
18	14.8	7.6	4.4	.0	---	---	---	---	---	---	---	---
19	14.8	7.1	3.8	.0	---	---	---	---	---	---	---	---
20	14.4	6.6	4.0	.0	---	---	---	---	---	---	---	---
21	13.7	6.1	2.7	.0	---	---	---	---	---	---	---	---
22	13.6	6.3	4.5	.0	---	---	---	---	---	---	---	---
23	13.6	7.7	4.5	.0	---	---	---	---	---	---	---	---
24	10.8	8.6	4.1	.0	---	---	---	---	---	---	---	---
25	15.6	9.8	1.9	.0	---	---	---	---	---	---	---	---
26	15.3	8.0	3.0	.4	---	---	---	---	---	---	---	---
27	15.1	7.9	3.3	.0	---	---	---	---	---	---	---	---
28	12.5	8.6	1.8	.0	---	---	---	---	---	---	---	---
29	11.4	8.7	1.5	.0	---	---	---	---	---	---	---	---
30	11.3	8.6	2.2	.0	---	---	---	---	---	---	---	---
31	10.5	7.7	---	---	---	---	---	---	---	---	---	---
MONTH	22.2	6.1	13.4	.0	---	---	---	---	---	---	---	---

09171100 DOLORES RIVER NEAR BEDROCK, CO

LOCATION.--Lat 38°21'29", long 108°49'54", in SW¼NW¼ sec.2, T.47 N., R.18 W., Montrose County, Hydrologic Unit 14030002, on right bank 2.5 mi downstream from West Paradox Creek and 4.3 mi northeast of Bedrock.

DRAINAGE AREA.--2,145 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1971 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 4,910 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Feb. 1, 1972, at site 400 ft upstream at datum 1.02 ft, higher.

REMARKS.--Estimated daily discharges: Dec. 26-28, Jan. 6-9, 16-22, Jan. 31 to Feb. 5, and Feb. 10-17. Records good except for estimated daily discharges, which are fair. Diversions upstream from station for irrigation of about 80,000 acres, of which about 74,760 acres are in the San Juan River basin. Flow regulated by McPhee Reservoir, capacity 381,000 acre-ft, since Mar. 19, 1984 .

AVERAGE DISCHARGE.--12 years (water years 1972-83), 502 ft³/s; 363,700 acre-ft/yr, prior to completion of McPhee Dam; 5 years (water years 1984-88), 552 ft³/s; 399,900 acre-ft/yr, subsequent to completion of McPhee Dam.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,500 ft³/s, Apr. 30, 1973, gage height, 12.88 ft, from floodmarks; minimum daily, 0.12 ft³/s, July 17, 18, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Sept. 6, 1970, reached a stage of 11.25 ft, site and datum in use prior to Feb. 1, 1972 (discharge, 5,710 ft³/s), by slope-area measurement at site 1,400 ft upstream.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,330 ft³/s at 0600 Nov. 6, gage height, 8.07 ft; minimum daily, 61 ft³/s, July 24-26.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	62	129	94	91	120	248	254	326	695	124	221	385
2	83	158	108	66	120	221	205	314	681	97	185	147
3	86	135	115	74	110	195	130	483	675	96	117	99
4	87	132	113	82	110	181	234	1350	669	117	83	83
5	89	125	140	89	110	170	336	1360	687	148	75	77
6	90	859	150	90	119	157	324	1320	665	115	73	75
7	90	409	122	90	116	160	339	1310	667	93	72	74
8	91	236	116	90	121	152	401	1350	658	84	68	72
9	91	165	112	90	123	165	407	1310	634	78	67	72
10	91	142	108	100	110	142	352	1060	453	74	68	73
11	91	129	106	102	120	135	285	636	292	73	63	77
12	91	125	99	101	120	134	240	317	233	75	65	110
13	91	120	79	98	120	123	228	271	225	71	68	665
14	105	118	92	94	120	117	230	265	220	69	65	295
15	138	121	68	89	120	119	251	275	300	68	62	145
16	117	117	72	85	120	118	378	279	278	66	68	105
17	111	117	129	85	120	116	393	287	197	66	180	92
18	98	109	120	85	123	116	464	318	139	68	132	85
19	96	107	141	85	123	112	361	399	107	66	84	80
20	95	107	121	85	125	110	306	1210	94	66	74	79
21	95	109	107	85	130	112	336	1260	90	63	384	81
22	95	110	106	85	139	119	295	1070	86	63	201	80
23	97	109	117	82	154	157	313	877	83	62	88	83
24	101	109	111	98	164	267	362	703	79	61	77	84
25	111	108	79	94	165	336	413	695	77	61	76	81
26	107	112	75	95	190	325	477	691	86	61	76	79
27	104	113	80	99	201	412	447	686	80	67	79	79
28	99	107	80	101	252	662	338	685	145	69	113	77
29	99	95	86	110	301	689	276	723	151	66	128	77
30	112	89	97	121	---	394	282	998	142	75	96	77
31	117	---	97	120	---	304	---	909	---	134	107	---
TOTAL	3030	4721	3240	2861	4066	6768	9707	23737	9588	2496	3315	3688
MEAN	97.7	157	105	92.3	140	218	324	766	320	80.5	107	123
MAX	138	859	150	121	301	689	477	1360	695	148	384	665
MIN	62	89	68	66	110	110	180	265	77	61	62	72
AC-FT	6010	9360	6430	5670	8060	13420	19250	47080	19020	4950	6580	7320

CAL YR 1987 TOTAL 228556 MEAN 626 MAX 4090 MIN 62 AC-FT 453300
WTR YR 1988 TOTAL 77217 MEAN 211 MAX 1360 MIN 61 AC-FT 153200

09171100 DOLORES RIVER NEAR BEDROCK, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Data collected 1.2 miles upstream from current site at station 09171070 from January 1979 to Dec. 2, 1987. Data between sites are not equivalent. At current site Dec. 2, 1987 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Dec. 2, 1987 to current year.
WATER TEMPERATURE: Dec. 2, 1987 to current year.

INSTRUMENTATION.--Water-quality monitor since Dec. 2, 1987.

REMARKS.--Daily maximum and minimum specific-conductance data available in district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 13,000 microsiemens Dec. 16, 1987; minimum, 350 microsiemens May 9 and 10, 1988.
WATER TEMPERATURES: Maximum, 32.7°C July 13, 1988; minimum, 0.0°C many days during December and January 1987-88.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum 13,000 microsiemens Dec. 16; minimum 350 microsiemens May 9 and 10.
WATER TEMPERATURES: Maximum, 32.7°C July 13; minimum, 0.0°C many days during December and January.

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO
JAN											
13...	1300	130	5100	8.3	0.0	350	210	74	41	990	24
MAR											
01...	1430	282	2330	7.4	9.0	310	180	72	32	360	9
MAY											
11...	1630	630	442	7.0	17.0	170	54	46	13	50	2
24...	1430	698	538	7.0	19.0	170	57	46	13	52	2
JUN											
09...	1120	658	648	8.1	18.5	160	45	44	11	69	3
28...	1545	135	5550	8.1	25.5	330	200	68	38	1100	27
AUG											
03...	0800	123	1880	6.9	21.0	200	78	54	16	270	9
SEP											
21...	1630	81	3700	8.2	20.0	360	230	87	34	590	14
22...	1130	79	3770	8.3	16.0	340	210	82	33	620	15

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)
JAN										
13...	53	144	210	1600	0.20	5.3	3060	4.16	1070	<0.10
MAR										
01...	18	128	250	530	0.20	5.8	1350	1.83	1020	0.20
MAY										
11...	3.2	115	78	63	0.20	5.4	328	0.45	558	<0.10
24...	3.6	112	75	71	0.20	4.9	335	0.46	631	0.41
JUN										
09...	4.3	110	59	100	0.30	4.0	358	0.49	635	<0.10
28...	36	128	180	1600	0.20	3.1	3100	4.22	1130	<0.10
AUG										
03...	11	123	160	400	0.30	5.1	992	1.35	329	0.42
SEP										
21...	32	129	250	960	0.20	4.5	2040	2.77	445	<0.10
22...	24	131	220	980	0.20	4.4	2040	2.78	436	<0.10

09171100 DOLORES RIVER NEAR BEDROCK, CO--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENTS/CM AT 25 DEG. C) WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	6070	---	---	1830	2020	585	2910	2330	2590
2	---	---	---	9410	---	3040	2190	1910	600	3970	1240	1150
3	---	---	4830	8520	---	3700	2520	1960	602	4580	1950	1300
4	---	---	5330	8050	---	3930	2290	876	601	3290	2870	1650
5	---	---	4080	6650	---	4050	1820	465	603	2820	3300	2070
6	---	---	3550	4360	---	4370	1970	414	566	3360	3850	2410
7	---	---	4890	3040	---	4030	2020	384	584	4170	4060	2690
8	---	---	5170	3160	---	4060	1740	367	622	5160	4090	2760
9	---	---	5010	3810	---	3890	1360	359	624	6020	4250	2790
10	---	---	5450	4520	---	4530	1480	363	774	5580	3770	2850
11	---	---	5650	4900	---	4600	1880	416	1220	5490	4150	2800
12	---	---	5860	4540	---	4330	2090	713	1540	5090	4080	2660
13	---	---	8600	5110	---	4530	1920	955	1540	5290	3780	1620
14	---	---	6860	---	---	4930	1920	1020	1630	5350	3920	1350
15	---	---	8530	---	---	4930	1900	979	1380	5330	4130	1720
16	---	---	10400	---	---	4780	1760	896	1210	5180	3960	2210
17	---	---	3670	---	---	4470	1450	835	1740	5160	2620	2590
18	---	---	4220	---	---	4470	1280	889	2620	4880	1270	2930
19	---	---	3430	---	---	4600	1400	864	3630	4850	2060	3090
20	---	---	4090	---	---	4770	1960	641	4100	4920	2670	3290
21	---	---	5420	---	---	4720	2220	472	4190	4910	3020	3470
22	---	---	5800	---	---	4440	2480	442	4320	5160	1810	3720
23	---	---	4830	---	---	3520	2500	459	4260	4960	1800	3610
24	---	---	5180	---	---	2020	2140	523	4310	5340	2300	3770
25	---	---	7830	---	---	1620	1930	562	4320	5200	2840	4070
26	---	---	7700	---	---	1430	1660	580	3740	5450	3170	4360
27	---	---	5530	---	---	1440	1580	555	3750	5360	3340	4720
28	---	---	6180	---	---	1430	2010	576	3130	5090	3230	4780
29	---	---	7450	---	---	1130	2530	630	2670	5130	2420	4930
30	---	---	6240	---	---	1180	2660	557	2590	4860	2690	5080
31	---	---	6300	---	---	1550	---	535	---	3920	3130	---
MEAN	---	---	---	---	---	---	1950	751	2135	4799	3035	2967

09171100 DOLORES RIVER NEAR BEDROCK, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	---	---	---	---	.0	.0	---	---	---	---
2	---	---	---	---	---	---	.0	.0	---	---	7.4	4.0
3	---	---	---	---	3.3	.0	.0	.0	---	---	[illegible]	[illegible]
4	---	---	---	---	1.0	.0	.0	.0	---	---	[illegible]	[illegible]
5	---	---	---	---	1.7	[illegible]	.6	[illegible]	---	---	[illegible]	3.4
6	---	---	---	---	2.6	.6	.7	.7	---	---	[illegible]	[illegible]
7	---	---	---	---	2.3	.4	.3	[illegible]	---	---	[illegible]	[illegible]
8	---	---	---	---	3.3	[illegible]	.5	[illegible]	---	---	[illegible]	[illegible]
9	---	---	---	---	[illegible]	.1	.4	[illegible]	---	---	[illegible]	[illegible]
10	---	---	---	---	1.7	.0	[illegible]	[illegible]	---	---	[illegible]	[illegible]
11	---	---	---	---	2.5	[illegible]	[illegible]	.0	---	---	[illegible]	[illegible]
12	---	---	---	---	1.5	[illegible]	[illegible]	.0	---	---	[illegible]	[illegible]
13	---	---	---	---	[illegible]	[illegible]	.4	.0	---	---	[illegible]	[illegible]
14	---	---	---	---	.7	.0	---	---	---	---	[illegible]	[illegible]
15	---	---	---	---	[illegible]	[illegible]	---	---	---	---	[illegible]	[illegible]
16	---	---	---	---	[illegible]	[illegible]	---	---	---	---	[illegible]	[illegible]
17	---	---	---	---	[illegible]	[illegible]	---	---	---	---	[illegible]	[illegible]
18	---	---	---	---	[illegible]	[illegible]	---	---	---	---	[illegible]	[illegible]
19	---	---	---	---	[illegible]	[illegible]	---	---	---	---	[illegible]	[illegible]
20	---	---	---	---	[illegible]	.0	---	---	---	---	[illegible]	[illegible]
21	---	---	---	---	[illegible]	[illegible]	---	---	---	---	[illegible]	[illegible]
22	---	---	---	---	[illegible]	[illegible]	---	---	---	---	[illegible]	[illegible]
23	---	---	---	---	[illegible]	[illegible]	---	---	---	---	[illegible]	[illegible]
24	---	---	---	---	.7	.0	---	---	---	---	[illegible]	[illegible]
25	---	---	---	---	[illegible]	[illegible]	---	---	---	---	[illegible]	[illegible]
26	---	---	---	---	[illegible]	.0	---	---	---	---	[illegible]	[illegible]
27	---	---	---	---	[illegible]	[illegible]	---	---	---	---	[illegible]	[illegible]
28	---	---	---	---	[illegible]	[illegible]	---	---	---	---	[illegible]	[illegible]
29	---	---	---	---	1.1	.0	---	---	---	---	[illegible]	[illegible]
30	---	---	---	---	[illegible]	.1	---	---	---	---	[illegible]	[illegible]
31	---	---	---	---	.9	.0	---	---	---	---	[illegible]	[illegible]
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	11.1	5.6	14.0	11.1	[illegible]	[illegible]	29.5	[illegible]	[illegible]	[illegible]	[illegible]	19.7
2	12.9	6.7	16.0	[illegible]	19.0	[illegible]	[illegible]	[illegible]	27.4	[illegible]	[illegible]	18.7
3	13.1	6.3	17.4	9.5	21.6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	17.6
4	11.8	9.1	13.3	10.9	[illegible]	17.1	29.6	21.0	[illegible]	21.0	[illegible]	17.2
5	12.9	7.3	12.9	[illegible]	23.1	18.4	28.4	19.3	29.7	18.6	27.1	17.1
6	15.6	8.1	13.2	[illegible]	22.2	17.8	31.3	21.4	30.7	21.6	26.5	16.3
7	15.9	9.4	12.0	7.9	21.7	16.9	31.6	[illegible]	29.0	21.7	[illegible]	[illegible]
8	14.6	10.3	11.9	7.3	21.8	16.3	30.8	20.6	28.3	19.5	[illegible]	15.7
9	13.5	8.3	13.4	9.7	21.4	16.5	27.5	21.1	30.7	[illegible]	[illegible]	[illegible]
10	13.6	7.1	15.0	9.6	21.3	16.2	30.6	19.5	25.8	[illegible]	[illegible]	15.9
11	15.4	7.7	17.3	13.7	22.1	16.7	30.9	19.9	[illegible]	17.3	[illegible]	[illegible]
12	17.2	9.1	20.8	12.4	23.7	16.3	30.9	21.3	27.6	18.9	[illegible]	[illegible]
13	16.7	10.6	21.6	14.7	21.5	17.5	32.7	21.1	27.0	18.0	17.6	[illegible]
14	14.4	11.6	22.7	15.5	24.5	16.0	30.7	20.7	27.9	17.4	18.5	13.0
15	17.9	11.5	24.2	16.2	22.6	17.5	31.1	21.3	26.7	19.1	20.1	12.6
16	14.0	11.8	23.4	17.2	26.3	17.4	30.8	19.7	27.6	19.5	21.5	12.8
17	15.0	10.4	21.3	18.0	24.5	19.1	28.3	20.1	27.5	18.9	20.9	13.1
18	14.0	10.4	19.5	16.3	27.2	19.5	31.4	19.1	28.2	20.2	20.6	13.9
19	15.9	10.1	18.1	15.6	28.6	19.3	30.5	18.1	29.0	18.8	19.8	10.5
20	15.7	11.0	16.2	13.4	29.8	19.7	30.3	18.9	27.5	19.5	19.6	10.9
21	13.2	10.5	15.7	11.0	30.7	20.3	31.7	18.7	22.9	19.2	20.2	14.9
22	10.3	8.5	17.2	11.7	31.0	20.1	31.1	19.3	26.2	18.3	19.7	12.9
23	11.8	7.4	18.3	12.8	31.1	20.8	28.2	18.9	29.2	18.9	19.8	12.0
24	14.5	9.1	19.3	14.3	31.6	21.8	29.7	19.8	29.3	20.8	20.9	12.8
25	14.2	9.3	18.9	15.1	30.4	21.6	30.0	19.5	29.7	21.3	20.6	13.1
26	15.6	9.2	20.1	15.1	29.8	20.0	29.6	20.1	28.7	20.5	19.0	13.4
27	16.7	10.0	19.9	15.8	30.0	21.4	30.5	21.0	29.0	20.2	19.4	12.9
28	17.2	12.0	21.1	15.5	26.0	21.6	30.3	20.8	28.5	20.2	17.7	11.5
29	19.7	12.1	19.1	15.9	27.2	22.4	30.9	20.8	29.3	20.0	17.3	10.2
30	18.5	12.7	16.0	13.9	30.9	20.6	30.4	21.5	29.7	20.1	17.8	10.6
31	---	---	15.3	11.6	---	---	30.7	21.4	28.6	19.9	---	---
MONTH	19.7	3.6	24.2	7.8	31.6	11.2	32.7	18.1	30.7	17.3	27.1	10.2

09172500 SAN MIGUEL RIVER NEAR PLACERVILLE, CO

LOCATION.--Lat 38°02'33", long 108°07'54", in NW¼NE¼ sec.25, T.44 N., R.12 W., San Miguel County, Hydrologic Unit 14030003, on right bank 1.5 mi downstream from Specie Creek in vicinity of mile marker 88.68 on State Highway 145 and 4.5 mi northwest of Placerville, Co.

DRAINAGE AREA.--310 mi².

PERIOD OF RECORD.--January to December 1909, September 1910 to December 1912, April 1930 to September 1934, April 1942 to current year. Monthly discharge only for some periods, published in WSP 1313. Published as "at Placerville," 1910-12.

GAGE.--Water-stage recorder. Datum of gage is 7,030 ft above National Geodetic Vertical Datum of 1929, from topographic map. See WSP 1713 or 1733 for history of changes prior to Oct. 21, 1958. Oct. 22, 1958 to Mar. 4, 1986, gage located 0.8 mi upstream from present site, at different datum. Mar. 5, 1986, gage moved to present site, at present datum.

REMARKS.--Estimated daily discharges: Nov. 14-22, 26, 27, Nov. 29 to Dec. 5, Dec. 12-14, 16-20, 22, and Dec. 24 to Feb. 29. Records good except for estimated daily discharges, which are poor. Diversions for irrigation of about 1,700 acres upstream from station. One diversion from Fall Creek for irrigation of about 2,000 acres in Beaver and Saltado Creek basins. One small ditch diverts water from Leopard Creek to Uncompahgre River basin. Slight regulation by Lake Hope and Trout Lake operated by Colorado Ute Electric Association, combined capacity, 5,040 acre-ft. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--52 years (water years 1911-12, 1931-34, 1943-88), 238 ft³/s; 172,400 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,000 ft³/s, Sept. 5, 1909 (result of failure of Trout and Middle Reservoir Dams); minimum daily, 26 ft³/s, Jan. 5, 1960.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 900 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
June 11	0130	958	4.14	June 27	1830	*1,110	*4.39

Minimum daily discharge, 48 ft³/s, Feb. 19.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	96	116	90	80	55	94	80	187	357	526	253	197
2	96	121	90	75	55	99	90	175	339	461	198	184
3	96	111	90	70	55	99	92	176	421	423	189	164
4	94	112	90	70	50	83	102	172	613	458	167	155
5	92	106	90	70	50	81	111	183	734	420	156	146
6	91	136	87	70	50	77	134	188	801	381	179	136
7	87	143	81	70	50	74	200	187	855	412	244	132
8	89	128	83	70	50	68	226	186	839	379	212	126
9	99	120	84	70	55	69	191	173	817	354	176	132
10	107	120	89	70	55	76	152	174	843	351	155	138
11	107	113	86	70	50	62	157	182	876	311	146	160
12	105	103	85	70	50	69	188	207	791	299	147	264
13	118	102	85	65	50	68	196	266	740	289	136	268
14	135	100	85	65	50	58	189	316	569	266	124	230
15	127	100	84	65	50	68	190	377	546	264	120	203
16	106	90	85	65	50	61	199	446	504	252	132	182
17	104	90	85	60	50	64	186	487	598	236	151	167
18	99	80	90	60	50	55	169	568	621	224	135	174
19	93	80	90	60	48	64	177	504	606	214	123	175
20	92	90	90	60	50	62	174	428	686	218	118	165
21	89	95	92	60	50	68	189	348	756	205	126	196
22	104	95	90	60	55	80	182	268	738	194	195	211
23	105	94	92	60	55	77	187	267	786	187	171	191
24	109	96	90	60	60	87	183	324	800	174	155	175
25	126	96	85	55	60	91	170	356	771	164	158	170
26	116	90	80	55	65	122	162	311	723	160	156	161
27	115	90	80	55	70	149	152	347	666	161	315	159
28	111	96	80	55	70	148	153	435	707	170	225	155
29	108	90	80	60	72	106	155	493	682	175	199	145
30	117	90	80	60	---	94	169	468	572	167	199	136
31	118	---	80	60	---	89	---	370	---	174	199	---
TOTAL	3251	3093	2668	1995	1580	2562	4905	9569	20357	8669	5359	5197
MEAN	105	103	86.1	64.4	54.5	82.6	163	309	679	280	173	173
MAX	135	143	92	80	72	149	226	568	876	526	315	268
MIN	87	80	80	55	48	55	80	172	339	160	118	126
AC-FT	6450	6130	5290	3960	3130	5080	9730	18980	40380	17190	10630	10310

CAL YR 1987 TOTAL 125035 MEAN 343 MAX 1390 MIN 70 AC-FT 248000
WTR YR 1988 TOTAL 69205 MEAN 189 MAX 876 MIN 48 AC-FT 137300

09177000 SAN MIGUEL RIVER AT URAVAN, CO

LOCATION.--Lat 38°21'26", long 108°42'44", in SW¼NE¼ sec.2, T.47 N., R.17 W., Montrose County, Hydrologic Unit 14030003, on right bank 20 ft downstream from bridge on State Highway 141, 400 ft downstream from Tabeguache Creek, and 1.5 mi southeast of Uravan.

DRAINAGE AREA.--1,499 mi².

PERIOD OF RECORD.--August 1954 to September 1962, October 1973 to current year.

REVISED RECORDS.--WRD Colo. 1974: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 5,000 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Sept. 3, 1959, at site 0.5 mi downstream at different datum.

REMARKS.--Estimated daily discharges: Oct. 6-13, Nov. 16-19, and Nov. 29 to Feb. 17. Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by storage reservoirs, diversions for irrigation of about 28,000 acres upstream from station, and return flow from irrigated areas. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--23 years (water years 1955-62, 1974-88), 403 ft³/s; 292,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,050 ft³/s, May 10, 1983, gage height, 11.14 ft, from rating curve extended above 4,100 ft³/s; minimum daily, 9.4 ft³/s, Aug. 10, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Sept. 6, 1970, reached a stage of 12.6 ft, from floodmarks, discharge, 8,910 ft³/s, by slope-area measurement at site 5.5 mi downstream.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,000 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 28	1100	---	*a6.3[illegible]	Apr. [illegible]	[illegible]	*[illegible]	[illegible]

a Backwater from ice.
Minimum daily discharge, 75 ft³/s, Jan. 24.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	128	178	100	100	110	154	218	409	434	[illegible]	[illegible]	201
2	124	233	100	85	180	227	202	410	457	[illegible]	129	132
3	124	189	110	95	230	199	237	377	392	481	161	165
4	124	163	120	100	150	185	293	356	432	[illegible]	[illegible]	143
5	122	160	120	110	110	169	335	336	682	[illegible]	[illegible]	133
6	100	533	110	110	100	164	379	[illegible]	763	[illegible]	[illegible]	125
7	100	266	110	110	100	169	586	340	858	[illegible]	[illegible]	119
8	100	215	110	110	110	139	872	324	872	[illegible]	[illegible]	103
9	95	185	100	100	110	114	763	300	836	[illegible]	[illegible]	99
10	95	170	110	110	110	124	564	284	831	[illegible]	[illegible]	109
11	95	160	110	110	110	126	482	296	871	[illegible]	[illegible]	132
12	100	154	110	95	110	104	547	335	843	277	[illegible]	271
13	100	144	110	90	110	103	601	305	767	[illegible]	[illegible]	537
14	156	146	110	80	110	139	549	493	626	[illegible]	97	313
15	233	158	110	80	110	134	583	588	557	[illegible]	[illegible]	233
16	177	130	110	80	120	142	596	631	496	[illegible]	95	139
17	152	110	110	80	120	130	567	635	524	[illegible]	85	165
18	148	100	130	80	125	126	472	827	577	132	90	148
19	140	100	120	80	134	118	421	859	625	[illegible]	[illegible]	150
20	132	115	120	80	142	130	410	772	641	154	83	148
21	134	138	110	85	152	140	415	611	750	156	[illegible]	139
22	128	140	110	80	198	181	469	483	758	143	100	168
23	142	130	120	80	234	230	458	421	793	132	137	169
24	150	128	120	75	230	262	455	407	809	126	117	156
25	162	125	120	80	249	252	435	435	806	115	[illegible]	146
26	173	142	110	85	252	303	389	420	800	[illegible]	122	138
27	155	142	100	85	232	413	349	400	691	151	[illegible]	128
28	154	124	100	95	261	630	340	455	792	131	269	123
29	148	100	100	100	245	350	336	546	791	122	197	122
30	171	100	110	100	---	313	356	654	718	132	169	117
31	177	---	120	100	---	257	---	568	---	174	208	---
TOTAL	4239	4878	3450	2850	4554	6272	13679	14761	20785	8153	4466	5099
MEAN	137	163	111	91.9	157	202	456	476	693	263	144	170
MAX	233	533	130	110	261	630	872	859	372	616	322	537
MIN	95	100	100	75	100	104	202	284	392	108	80	99
AC-FT	8410	9680	6840	5650	9030	12440	27130	29280	41230	16170	8860	10110

CAL YR 1987 TOTAL 223168 MEAN 611 MAX 3940 MIN 95 AC-FT 442700
WTR YR 1988 TOTAL 93187 MEAN 255 MAX 872 MIN 75 AC-FT 184800

09237500 YAMPA RIVER NEAR OAK CREEK, CO.

LOCATION.--Lat 40°17'15", long 106°49'33", in SE¼NE¼ sec. 29, T. 4 N., R. 84 W., Routt County, Hydrologic Unit 14050001, on left bank, 1.0 mi upstream from Morrison Creek and 6.5 mi east of Oak Creek, Co.

DRAINAGE AREA.--227 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1939 to September 1944 (monthly discharge only for some periods, published in WSP 1313), October 1956 to September 1972, October 1984 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 7,050 ft above National Geodetic Vertical Datum of 1929, from topographic map. Sept. 1939 to Nov. 15, 1939, nonrecording gage, Nov. 16 1939, to Sept 1944 and Oct. 1956 to Sept 1972, water-stage recorder at site 0.5 mi upstream, at different datum.

REMARKS.--Estimated daily discharges: Nov. 17 to Apr. 12. Records good except for estimated daily discharges, which are poor. Diversions for irrigation of about 12,000 acres upstream from station. Natural flow of stream affected by 2 diversions for irrigation to Egeria Creek into Colorado River basin and by storage in Stillwater, Yampa and YamColo Reservoirs (total capacity, 15,820 acre-ft).

AVERAGE DISCHARGE.--25 years, 89.4 ft³/s; 64,770 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,430 ft³/s, Apr. 16, 1962, gage height, 7.56 ft, from rating curve extended above 570 ft³/s, site and datum then in use; maximum gage height, 9.05 ft, Mar. 8, 1987, (backwater from ice); minimum daily discharge, 4.9 ft³/s, May 30, 1961.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 509 ft³/s at 1900 Apr. 15, gage height, 3.84 ft; minimum daily, 17 ft³/s, Dec. 6-14.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	[illegible]	57	[illegible]	33	[illegible]	37	[illegible]	245	134	99	96	43
2	[illegible]	71	[illegible]	31	36	43	97	[illegible]	99	97	96	42
3	37	71	[illegible]	[illegible]	29	34	101	[illegible]	[illegible]	116	97	41
4	34	7[illegible]	[illegible]	32	24	30	116	134	97	127	99	39
5	31	77	18	35	21	34	115	154	124	132	92	33
6	37	57	17	36	[illegible]	[illegible]	130	196	113	107	86	30
7	34	91	17	27	[illegible]	34	137	161	91	111	91	27
8	37	91	17	74	23	31	137	165	87	101	88	26
9	35	34	17	32	31	32	153	154	81	97	82	23
10	36	66	17	31	33	37	173	146	84	105	77	22
11	34	51	17	21	30	32	132	141	92	114	73	27
12	33	52	17	23	35	32	191	151	122	113	71	55
13	39	53	17	21	33	37	327	165	123	107	75	79
14	46	52	17	23	32	33	432	172	127	97	71	61
15	52	56	18	20	33	35	475	164	115	101	63	55
16	65	51	23	24	34	31	432	163	107	94	83	56
17	60	56	23	23	34	35	444	161	134	93	79	50
18	59	56	21	25	32	34	324	195	134	92	73	46
19	59	35	22	27	32	33	316	219	104	82	67	44
20	54	34	21	24	32	34	397	223	105	74	64	48
21	58	33	23	23	33	30	333	159	136	77	71	48
22	60	20	22	25	33	37	313	133	171	79	75	58
23	62	20	22	26	34	39	202	118	127	85	69	56
24	59	20	22	27	33	40	209	106	113	80	64	58
25	96	20	21	28	33	45	197	106	103	80	61	57
26	59	19	23	29	33	50	193	112	90	82	58	52
27	54	19	21	30	33	55	197	117	96	94	55	51
28	55	19	22	30	33	60	185	120	124	100	50	53
29	59	19	22	30	33	70	199	122	175	101	47	56
30	67	19	23	31	---	75	210	126	121	101	43	54
31	72	---	23	29	---	80	---	127	---	98	44	---
TOTAL	1557	1461	601	765	895	1241	6937	4978	3264	2962	2265	1389
MEAN	50.2	48.7	19.4	24.7	30.9	40.0	231	161	109	95.5	73.1	46.3
MAX	96	91	23	31	36	80	475	245	175	114	99	79
MIN	31	19	17	20	20	30	90	106	81	74	43	22
AC-FT	3090	2900	1190	1520	1780	2460	13760	9870	6470	5880	4490	2760

CAL YR 1987 TOTAL 24686 MEAN 67.6 MAX 246 MIN 17 AC-FT 48960
WTR YR 1988 TOTAL 28315 MEAN 77.4 MAX 475 MIN 17 AC-FT 56160

09237500 YAMPA RIVER NEAR OAK CREEK, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--July 1984 to current year.

PERIOD OF DAILY RECORD.--
SUSPENDED SEDIMENT DISCHARGE: May 1985 to September 1988, (discontinued).

INSTRUMENTATION.--Automatic pumping sediment sampler May 1985 to September 1988.

REMARKS.--This station is part of a hydrologic investigation for a proposed reservoir, data for related stations, Martin Creek, Little Morrison Creek, Middle Creek, and Yampa River, (all located above the dam site) are published elsewhere in this report. Unpublished daily sediment discharge for May to September, 1988 are available from district office.

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
OCT										
05...	1140	31	454	8.6	9.0	6.6	240	60	21	13
NOV										
10...	1030	36	419	8.3	2.0	11.0	220	55	21	12
FEB										
18...	1300	32	356	8.1	0.5	7.5	190	49	17	11
APR										
20...	1230	355	368	8.3	5.5	12.9	190	48	17	11
MAY										
18...	1130	217	306	8.2	10.0	11.3	160	40	14	8.4
JUN										
09...	1230	89	469	8.6	16.5	8.1	240	62	21	13
JUL										
26...	1230	86	533	8.6	19.5	8.4	270	61	28	13
AUG										
24...	1215	63	--	8.5	16.5	8.1	210	53	19	11

DATE	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)
OCT									
05...	0.4	2.4	198	56	2.1	0.2	20	294	0.40
NOV									
10...	0.4	2.1	185	66	2.3	0.2	19	289	0.39
FEB									
18...	0.4	2.6	167	43	2.4	0.2	19	246	0.33
APR									
20...	0.4	3.3	131	75	3.0	0.2	15	252	0.34
MAY									
18...	0.3	1.7	128	42	2.6	0.3	15	201	0.27
JUN									
09...	0.4	2.7	197	64	2.9	0.4	21	305	0.41
JUL									
26...	0.4	2.4	217	72	2.1	0.1	22	333	0.45
AUG									
24...	0.3	1.9	178	50	2.5	0.1	19	260	0.35

DATE	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P)	PHOS-PHOROUS ORTHO, DIS-SOLVED (MG/L AS P)
OCT							
05...	24.4	<0.01	<0.1	<0.01	0.20	0.02	<0.01
NOV							
10...	27.9	<0.01	<0.1	0.04	0.40	0.02	0.01
FEB							
18...	21.4	0.01	0.22	0.07	0.60	0.06	0.02
APR							
20...	242	0.01	0.15	0.03	0.40	0.04	0.02
MAY							
18...	118	<0.01	<0.1	0.04	0.60	0.04	0.04
JUN							
09...	73.0	--	--	--	0.40	0.07	--
JUL							
26...	77.6	<0.01	<0.1	0.02	<0.2	0.03	<0.01
AUG							
24...	44.6	<0.01	<0.1	0.03	0.40	0.05	0.02

09237500 YAMPA RIVER NEAR OAK CREEK, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	ALUMINUM, DISSOLVED (UG/L AS AL)	ANTIMONY, DISSOLVED (UG/L AS SB)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, DISSOLVED (UG/L AS BA)	BERYLLIUM, DISSOLVED (UG/L AS BE)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)
OCT										
[illegible]...	<10	<1	1	43	<0.5	<1	<1	<1	4	62
FEB										
16...	<1	[illegible]	<1	<100	<0.5	<1	<1	<1	5	13
APR										
[illegible]...	[illegible]	<1	<1	41	<0.5	<1	<1	<1	1	56

DATE	[illegible]	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY DISSOLVED (UG/L AS HG)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, DISSOLVED (UG/L AS AG)	STRONTIUM, DISSOLVED (UG/L AS SR)	ZINC, DISSOLVED (UG/L AS ZN)
OCT									
[illegible]...	<5	9	<0.1	<1	1	<1	<1.0	320	13
FEB									
[illegible]...	<5	2[illegible]	<0.1	2	<1	<1	2.0	270	4
APR									
[illegible]...	<5	28	<0.1	[illegible]	5	<1	<1.0	260	<3

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE WATER (DEG C)	DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE WATER (DEG C)
[illegible]					MAR				
1...	[illegible]	117	345	0.0	18...	1105	34	315	4.0

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT					
[illegible]...	1140	31	18	1.5	--
NOV					
[illegible]...	1030	[illegible]	28	2.7	54
FEB					
15...	1300	32	41	3.6	--
APR					
[illegible]...	1230	127	519	178	--
[illegible]...	1400	305	340	280	--
[illegible]...	1230	355	228	219	91
MAY					
[illegible]...	1300	141	60	23	--
[illegible]...	1200	184	195	97	--
[illegible]...	1130	217	363	213	96
JUN					
[illegible]...	1230	89	30	7.2	--
30...	1030	117	41	13	--
JUL					
26...	1230	86	19	4.4	--
AUG					
24...	1215	63	28	4.9	72
SEP					
30...	1400	70	13	2.4	--

09238705 LONG LAKE INLET NEAR BUFFALO PASS, CO

LOCATION.--Lat 40°28'25", Long 106°40'46", in SE¼NW¼ sec. 23, T.6N., R.83W., Routt County, Hydrologic Unit 14050001, on left bank 0.1 mi above Long Lake, and 7.5 mi east of Steamboat Springs.

DRAINAGE AREA.--0.71 mi².

PERIOD OF RECORD.--October 1986 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 9,875 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 14 to June. 7. Records fair except for estimated daily discharges, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 62 ft³/s, June 16, 1988, gage height, 2.99 ft; no flow, Jan. 24-29, March 14-19, 26-30, 1988.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 62 ft³/s at 2100 June 16, gage height, 2.99 ft; no flow, Jan. 24-29, March 14-19, March 26-30.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.03	.38	.06	.06	.05	.06	.02	.06	3.2	5.1	.11	.07
2	.02	.35	.06	.06	.06	.06	.02	.06	7.3	2.8	.09	.07
3	.02	.20	.04	.06	.06	.06	.03	.07	12	2.4	.09	.07
4	.01	.29	.04	.05	.07	.04	.02	.07	25	2.0	.10	.07
5	.01	.38	.04	.05	.07	.04	.04	.07	27	2.0	.08	.07
6	.01	.17	.06	.05	.07	.04	.04	.07	30	1.7	.08	.04
7	.01	.11	.06	.04	.07	.04	.04	.07	35	1.4	.11	.01
8	.02	.11	.06	.04	.08	.04	.04	.07	33	1.1	.08	.01
9	.02	.10	.07	.04	.08	.02	.04	.07	30	.97	.07	.01
10	.02	.10	.07	.03	.08	.02	.04	.06	26	.90	.07	.04
11	.01	.03	.07	.03	.10	.02	.04	.06	22	.82	.07	.11
12	.02	.06	.07	.03	.10	.02	.04	.06	19	.74	.07	.10
13	.29	.07	.07	.03	.10	.02	.04	.08	19	.61	.07	.12
14	.28	.06	.07	.03	.10	.00	.04	.07	20	.54	.06	.14
15	.40	.06	.07	.02	.10	.00	.04	.08	28	.47	.07	.16
16	.27	.06	.07	.02	.10	.00	.04	.08	31	.46	.08	.25
17	.21	.06	.07	.02	.10	.00	.06	.06	25	.43	.07	.13
18	.14	.06	.07	.02	.10	.00	.06	.08	25	.29	.07	.09
19	.09	.06	.07	.02	.10	.00	.04	.08	20	.21	.06	.07
20	.08	.06	.07	.02	.08	.02	.05	.10	20	.19	.06	.07
21	.05	.06	.07	.01	.08	.02	.06	.30	21	.16	.08	.07
22	.04	.07	.07	.01	.08	.02	.06	.70	20	.15	.06	.08
23	.04	.07	.07	.01	.08	.02	.07	.85	15	.15	.06	.08
24	.06	.07	.07	.00	.08	.02	.07	1.2	12	.14	.06	.07
25	.07	.07	.07	.00	.06	.02	.06	1.0	12	.12	.05	.07
26	.07	.07	.08	.00	.06	.00	.06	.75	9.8	.12	.06	.07
27	.09	.07	.06	.00	.06	.00	.08	1.8	6.8	.12	.07	.07
28	.13	.07	.06	.00	.06	.00	.07	3.5	8.0	.11	.06	.10
29	.32	.07	.06	.00	.06	.00	.07	5.6	7.1	.13	.06	.11
30	.34	.07	.06	.01	---	.00	.07	4.5	8.4	.13	.05	.09
31	.23	---	.06	.02	---	.02	---	4.0	---	.11	.05	---
TOTAL	3.40	3.51	1.99	0.78	2.29	0.62	1.45	25.62	577.6	26.57	2.22	2.51
MEAN	.11	.12	.064	.025	.079	.020	.048	.83	19.3	.86	.072	.084
MAX	.40	.38	.08	.06	.10	.06	.08	5.6	35	5.1	.11	.25
MIN	.01	.06	.04	.00	.05	.00	.02	.06	3.2	.11	.05	.01
AC-FT	6.7	7.0	3.9	1.5	4.5	1.2	2.9	51	1150	53	4.4	5.0

CAL YR 1987 TOTAL 417.69 MEAN 1.14 MAX 13 MIN .01 AC-FT 828
WTR YR 1988 TOTAL 648.56 MEAN 1.77 MAX 35 MIN .00 AC-FT 1290

09238710 FISH CREEK TRIBUTARY BELOW LONG LAKE, NEAR BUFFALO PASS, CO.

LOCATION.--Lat 40°28'36", Long 106°41'13", in NE¼SE¼ sec. 22, T.6N., R.83W., Routt county, Hydrologic Unit 14050001, on right bank, 0.1 mi below Long Lake Spillway, and 7.5 mi east of Steamboat Springs.

DRAINAGE AREA.--1.03 mi^2.

PERIOD OF RECORD.--August 29, 1984 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 9,860 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Mar. 22 to June 7. Records fair except for estimated daily discharges, which are poor. Flow regulated by Long Lake Reservoir, capacity 397 acre-ft, 0.1 mi upstream.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge 59 ft^3/s, June 17, 1986, from rating curve extended above 33 ft^3/s; maximum gage height, 3.13 ft, May 16, 1987 (backwater from ice); no flow many days each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 46 ft^3/s at 2100 June 16, gage height, 2.29 ft; no flow many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.0	.00	.00	.00	.00	.00	.00	.00	.00	4.5	.00	.00
2	.0	.00	.00	.00	.00	.00	.00	.00	.00	3.5	.00	.00
3	.0	.00	.00	.00	.00	.00	.00	.00	.00	3.0	.00	.00
4	.0	.00	.00	.00	.00	.00	.00	.00	.75	2.6	.00	.00
5	.0	.00	.00	.00	.00	.00	.00	.00	1.8	2.2	.00	.00
6	.0	.00	.00	.00	.00	.00	.00	.00	5.6	1.9	.00	.00
7	.0	.00	.00	.00	.00	.00	.00	.00	34	1.5	.00	.00
8	.0	.00	.00	.00	.00	.00	.00	.00	28	1.2	.00	.00
9	.0	.00	.00	.00	.00	.00	.00	.00	27	.96	.00	.00
10	.0	.00	.00	.00	.00	.00	.00	.00	26	.79	.00	.00
11	.0	.00	.00	.00	.00	.00	.00	.00	24	.57	.00	.00
12	.0	.00	.00	.00	.00	.00	.00	.00	18	.45	.00	.00
13	.0	.00	.00	.00	.00	.00	.00	.00	18	.36	.00	.00
14	.0	.00	.00	.00	.00	.00	.00	.00	22	.27	.00	.00
15	.0	.00	.00	.00	.00	.00	.00	.00	27	.21	.00	.00
16	.0	.00	.00	.00	.00	.00	.00	.00	29	.14	.00	.00
17	.0	.00	.00	.00	.00	.00	.00	.00	23	.08	.00	.00
18	.0	.00	.00	.00	.00	.00	.00	.00	24	.05	.00	.00
19	.0	.00	.00	.00	.00	.00	.00	.00	21	.02	.00	.00
20	.0	.00	.00	.00	.00	.00	.00	.00	20	.00	.00	.00
21	.0	.00	.00	.00	.00	.00	.00	.00	19	.00	.00	.00
22	.0	.00	.00	.00	.00	.00	.00	.00	17	.00	.00	.00
23	.0	.00	.00	.00	.00	.00	.00	.00	13	.00	.00	.00
24	.0	.00	.00	.00	.00	.00	.00	.00	11	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	10	.00	.00	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	8.5	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	.00	8.1	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	7.9	.00	.00	.00
29	.00	.00	.00	.00	.00	.00	.00	.00	8.6	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.00	6.9	.00	.00	---
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	459.15	24.30	0.00	0.00
MEAN	.00	.00	.00	.00	.00	.00	.00	.00	15.3	.78	.00	.00
MAX	.00	.00	.00	.00	.00	.00	.00	.00	34	4.5	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.0	.0	.0	.0	.0	.0	.0	.0	911	48	.0	.0

CAL YR 1987 TOTAL 305.27 MEAN .84 MAX 28 MIN .00 AC-FT 606
WTR YR 1988 TOTAL 483.45 MEAN 1.32 MAX 34 MIN .00 AC-FT 959

09238750 MIDDLE FORK FISH CREEK NEAR BUFFALO PASS, CO

LOCATION.--Lat 40°26'54", Long 106°41'30", in NE¼SE¼ sec. 10, T.6N., R.83W., Routt County, Hydrologic Unit 14050001, on right bank, 0.25 mi above Fish Creek Reservoir, and 7.5 mi east of Steamboat Springs.

DRAINAGE AREA.--1.37 mi^2.

PERIOD OF RECORD.--August 31, 1984 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 9,955 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 12 to March 28, Apr. 8, and Apr. 25 to July 7. Records good except for estimated daily discharges, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 146 ft^3/s, June 9, 1986, from rating curve extended above 24 ft^3/s; gage height, 4.56 ft; no flow, Feb. 17-20, 1988.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 60 ft^3/s, June 7; no flow, Feb. 18-20.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.14	.74	.30	.30	.09	.09	.20	.35	15	9.0	.36	.16
2	.14	.64	.30	.30	.09	.10	.20	.35	25	5.0	.33	.17
3	.14	.40	.25	.30	.09	.11	.19	.40	30	4.0	.34	.16
4	.14	.55	.25	.25	.09	.12	.19	.40	45	3.5	.36	.15
5	.13	.65	.25	.25	.09	.13	.19	.40	50	3.5	.28	.15
6	.14	.46	.30	.25	.08	.14	.19	.40	54	3.0	.27	.14
7	.14	.46	.30	.25	.08	.15	.21	.40	60	2.4	.37	.09
8	.13	.47	.30	.20	.08	.15	.24	.40	54	1.9	.29	.09
9	.14	.46	.35	.20	.08	.16	.25	.40	50	1.5	.25	.10
10	.13	.43	.35	.20	.08	.16	.22	.35	47	1.4	.24	.12
11	.13	.38	.35	.20	.07	.17	.22	.35	45	1.3	.23	.21
12	.13	.30	.35	.20	.06	.17	.24	.35	42	1.2	.27	.21
13	.25	.35	.35	.20	.05	.18	.27	.45	39	.91	.27	.23
14	.36	.30	.35	.20	.04	.18	.27	.40	39	.77	.22	.27
15	.40	.30	.35	.20	.03	.18	.27	.45	40	.70	.20	.26
16	.33	.30	.35	.15	.02	.18	.27	.45	42	.69	.27	.42
17	.32	.30	.35	.15	.01	.18	.35	.35	38	.66	.21	.25
18	.27	.30	.35	.15	.00	.19	.35	.45	38	.55	.21	.19
19	.23	.30	.35	.15	.00	.19	.27	.45	31	.54	.19	.17
20	.21	.30	.35	.15	.00	.20	.30	.60	31	.50	.19	.17
21	.20	.30	.35	.10	.01	.18	.35	1.1	32	.45	.26	.16
22	.17	.30	.35	.10	.02	.19	.35	2.5	30	.42	.20	.19
23	.18	.35	.35	.10	.03	.20	.40	4.0	27	.41	.18	.19
24	.19	.35	.35	.10	.04	.20	.40	6.4	23	.40	.18	.17
25	.26	.35	.35	.10	.05	.20	.35	5.8	19	.37	.17	.16
26	.24	.35	.40	.10	.06	.21	.35	5.0	15	.36	.16	.15
27	.26	.35	.30	.10	.07	.22	.45	11	9.0	.36	.17	.16
28	.29	.35	.30	.10	.08	.22	.40	22	11	.34	.16	.19
29	.56	.35	.30	.10	.09	.22	.40	21	10	.34	.15	.21
30	.48	.35	.30	.10	---	.21	.40	20	12	.55	.15	.19
31	.56	---	.30	.10	---	.20	---	18	---	.48	.15	---
TOTAL	7.39	11.79	10.10	5.35	1.58	5.38	8.74	124.95	1003.0	47.50	7.28	5.48
MEAN	.24	.39	.33	.17	.054	.17	.29	4.03	33.4	1.53	.23	.18
MAX	.56	.74	.40	.30	.09	.22	.45	22	60	9.0	.37	.42
MIN	.13	.30	.25	.10	.00	.09	.19	.35	9.0	.34	.15	.09
AC-FT	15	23	20	11	3.1	11	17	248	1990	94	14	11

CAL YR 1987 TOTAL 1028.87 MEAN 2.82 MAX 66 MIN .13 AC-FT 2040
WTR YR 1988 TOTAL 1238.54 MEAN 3.38 MAX 60 MIN .00 AC-FT 2460

09238770 GRANITE CREEK NEAR BUFFALO PASS, CO

LOCATION.--Lat 40°29'35", Long 106°41'31", NE¼NE¼ sec. 15, T.6N., R.83W., Routt County, Hydrologic Unit 14050001, on left bank 0.1 mi upstream from Fish Creek Reservoir, and 7.5 mi east of Steamboat Springs.

DRAINAGE AREA.--2.82 mi^2.

PERIOD OF RECORD.--August 31, 1984 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 9,875 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 30, 31, and Dec. 6 to July 7. Records good except for estimated daily discharges, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 103 ft^3/s, June 7, 1988; minimum daily, 0.13 ft^3/s, Mar. 21, 1988.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 103 ft^3/s, June 7; minimum daily, 0.13 ft^3/s, Mar. 21.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.45	1.6	1.1	.50	.52	.48	.24	.60	20	17	1.2	.50
2	.44	1.4	1.1	.50	.52	.46	.26	.60	30	17	1.0	.50
3	.42	1.0	.95	.50	.52	.44	.28	.60	35	16	1.1	.46
4	.42	1.3	.87	.48	.52	.42	.30	.60	50	14	1.2	.46
5	.42	1.2	.89	.46	.54	.40	.32	.60	70	10	.95	.46
6	.42	1.0	.90	.46	.54	.38	.34	.70	75	6.0	.90	.46
7	.42	.97	.90	.46	.56	.36	.36	.70	103	6.4	1.2	.47
8	.42	.90	.90	.44	.56	.34	.38	.70	86	5.7	1.1	.42
9	.42	.76	.95	.44	.56	.32	.40	.70	85	5.4	.84	.42
10	.40	.73	.95	.44	.58	.30	.42	.70	89	4.9	.78	.50
11	.39	.70	.95	.44	.58	.28	.42	.80	90	4.5	.75	.87
12	.41	.75	.95	.44	.60	.26	.44	.80	78	4.1	.81	.95
13	.99	.73	.95	.44	.60	.24	.44	.80	78	3.5	.84	1.1
14	1.2	.70	.95	.44	.60	.22	.44	.80	90	3.0	.69	1.1
15	1.1	.70	.95	.44	.60	.20	.44	.80	103	2.7	.64	1.0
16	.94	.70	.95	.40	.64	.18	.46	.90	99	2.8	.81	1.3
17	.78	.70	.95	.40	.66	.16	.48	.90	94	2.6	.67	.95
18	.73	.73	.95	.40	.68	.14	.48	.90	89	2.1	.67	.71
19	.64	.84	.95	.40	.71	.14	.48	.90	96	2.1	.62	.66
20	.54	1.0	.95	.40	.68	.14	.48	.90	89	2.0	.57	.66
21	.67	1.1	.95	.42	.66	.13	.50	1.0	83	1.7	.81	.65
22	.41	1.1	.95	.42	.64	.14	.50	4.0	85	1.6	.64	.76
23	.42	1.1	.95	.42	.62	.14	.50	6.0	70	1.4	.54	.79
24	.50	1.1	.95	.44	.60	.14	.50	9.0	69	1.4	.53	.79
25	.77	1.0	.95	.44	.58	.14	.50	8.0	65	1.3	.50	.79
26	.64	1.1	.97	.46	.56	.16	.55	7.0	61	1.3	.53	.79
27	.64	1.1	.70	.46	.54	.16	.55	14	57	1.3	.51	.80
28	.69	1.0	.50	.48	.52	.18	.55	29	44	1.2	.48	.99
29	1.1	1.0	.48	.48	.50	.20	.55	25	35	1.2	.46	1.0
30	1.2	1.0	.50	.50	---	.20	.55	23	24	1.3	.46	1.1
31	1.3	---	.50	.50	---	.22	---	21	---	1.3	.46	---
TOTAL	20.29	29.01	27.41	13.90	16.99	7.67	13.11	162.00	2142	146.8	23.26	22.41
MEAN	.65	.97	.88	.45	.59	.25	.44	5.23	71.4	4.74	.75	.75
MAX	1.3	1.6	1.1	.50	.71	.48	.55	29	103	17	1.2	1.3
MIN	.39	.70	.48	.40	.50	.13	.24	.60	20	1.2	.46	.42
AC-FT	40	58	54	28	34	15	26	321	4250	291	46	44

CAL YR 1987 TOTAL 2102.47 MEAN 5.76 MAX 49 MIN .36 AC-FT 4170
WTR YR 1988 TOTAL 2624.85 MEAN 7.17 MAX 103 MIN .13 AC-FT 5210

09238800 MIDDLE FORK FISH CREEK TRIBUTARY, BELOW FISH CREEK RESERVOIR, CO

LOCATION.--Lat 40°29'50", Long 106°41'54", in NW¼SE¼ sec. 10, T.6N., R.83W., Routt County, Hydrologic Unit 14050001, on right bank, at Fish Creek Reservoir Spillway, and 7.5 mi east of Steamboat Springs.

DRAINAGE AREA.--4.78 mi^2.

PERIOD OF RECORD.--August 31, 1984 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 9,855 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: June 4-7, and June 20 to July 7. Records excellent except for periods of flow, which are fair. Flow regulated by Fish Creek Reservoir, capacity, 1,840 acre-ft.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 136 ft^3/s, June 15, 1988, gage height, 1.82 ft; maximum gage height, 3.67 ft, May 10, 1987 (ice jam); no flow many days most years.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 143 ft^3/s, June 15, no flow many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	26	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	22	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	20	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	25	16	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	50	12	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	75	9.0	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	100	8.0	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	138	6.6	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	135	5.3	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	136	4.6	.00	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	135	4.0	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	120	3.5	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	117	3.0	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	129	2.3	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	143	1.7	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	141	1.4	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	132	1.2	.00	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	127	.92	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	127	.65	.00	.00
20	.00	.00	.00	.00	.00	.00	.00	.00	120	.68	.00	.00
21	.00	.00	.00	.00	.00	.00	.00	.00	115	.66	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	105	.66	.00	.00
23	.00	.00	.00	.00	.00	.00	.00	.00	97	.62	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	92	.58	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	84	.55	.00	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	76	.53	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	.00	66	.34	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	55	.12	.00	.00
29	.00	.00	.00	.00	.00	.00	.00	.00	45	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.00	36	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2721.00	152.91	0.00	0.00
MEAN	.00	.00	.00	.00	.00	.00	.00	.00	90.7	4.93	.00	.00
MAX	.00	.00	.00	.00	.00	.00	.00	.00	143	26	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.0	.0	.0	.0	.0	.0	.0	.0	5400	303	.0	.0

CAL YR 1987 TOTAL 2111.87 MEAN 5.79 MAX 77 MIN .00 AC-FT 4190
WTR YR 1988 TOTAL 2873.91 MEAN 7.85 MAX 143 MIN .00 AC-FT 5700

09238900 FISH CREEK AT UPPER STATION, NEAR STEAMBOAT SPRINGS, CO

LOCATION.--Lat 40°28'30", long 106°47'11", in SE¼SE¼ sec.15, T.6 N., R.84 W., Routt County, Hydrologic Unit 14050001, on right bank 2.6 mi upstream from mouth and 2.5 mi east of Steamboat Springs.

DRAINAGE AREA.--24.8 mi².

PERIOD OF RECORD.--October 1966 to September 1972, May 1982 to current year.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 7,150 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Dec. 4-14 and Sept. 9-10. Records good. Diversions upstream from station by Mount Werner Recreation district and City of Steamboat Springs for domestic use began in 1972 (see table below for figures of diversion). Natural flow of stream affected by storage in Fish Creek and Long Lake Reservoir, combined capacity 2,237 acre-ft. Several observations of specific conductance and water temperature were obtained and are published elswhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,110 ft³/s, June 20, 1968, gage height, 3.14 ft; minimum daily, 0.01 ft³/s, Aug. 7, 1972.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 754 ft³/s, at 2045 June 7, gage height, 2.69 ft; minimum daily, 0.28 ft³/s, Sept. 8.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.1	10	5.4	3.8	3.6	4.9	7.0	90	288	86	6.7	3.9
2	3.4	14	5.5	4.3	4.3	4.9	7.5	74	303	67	6.0	4.1
3	3.3	9.8	5.7	4.2	4.2	5.1	8.8	61	436	59	5.3	3.3
4	3.3	8.2	5.9	4.6	4.2	4.9	9.4	58	551	50	4.2	3.6
5	3.3	8.1	5.7	4.1	3.9	4.6	8.8	65	612	45	2.8	3.4
6	3.3	7.6	5.6	3.9	3.7	4.6	12	75	581	38	2.1	3.3
7	3.4	7.1	5.5	3.7	3.9	4.8	19	62	588	30	2.9	1.0
8	3.3	7.0	5.4	3.8	4.0	5.0	23	55	570	25	4.2	.28
9	3.4	6.6	5.3	4.0	4.2	5.1	17	49	534	21	2.7	.45
10	4.4	7.3	5.2	4.6	4.4	5.3	18	48	534	19	1.1	1.6
11	3.9	6.8	5.1	4.6	4.5	5.0	17	52	492	16	4.6	5.0
12	3.0	6.7	5.0	4.6	3.6	4.8	26	78	427	15	5.1	6.7
13	5.5	6.3	4.9	4.2	3.6	4.8	40	122	405	12	6.5	6.7
14	12	6.7	4.8	4.8	3.7	4.9	54	179	425	11	5.4	6.1
15	9.0	6.8	5.3	4.4	4.0	4.7	65	215	438	7.6	4.4	5.6
16	7.3	5.8	6.1	4.4	4.0	4.6	84	245	434	8.0	6.3	5.4
17	5.9	6.1	6.3	3.9	4.0	4.5	86	287	383	7.0	6.5	6.1
18	5.9	6.2	4.9	3.8	4.1	4.3	85	349	369	5.9	5.9	4.8
19	5.5	6.4	4.6	4.1	3.8	4.2	86	308	367	5.9	4.7	4.1
20	4.8	6.9	4.4	4.4	3.9	4.6	76	189	351	7.9	4.3	4.0
21	4.8	6.7	4.8	4.1	4.1	5.7	73	137	316	6.9	6.4	3.8
22	4.7	6.2	4.3	3.8	3.5	7.0	59	119	284	5.6	6.5	3.7
23	4.8	6.1	4.3	3.9	3.5	6.3	47	134	242	4.8	5.1	3.0
24	5.8	6.4	6.2	3.6	3.7	6.2	43	218	212	5.0	4.0	3.4
25	9.9	6.5	4.4	3.3	4.3	6.1	39	287	186	5.0	4.1	3.2
26	6.9	6.0	4.6	3.8	4.1	6.8	37	314	156	3.8	3.9	3.1
27	6.3	5.9	5.3	3.5	4.6	9.9	33	323	150	6.2	4.4	3.4
28	5.8	5.8	4.1	3.7	5.1	10	37	348	143	5.4	4.7	3.7
29	5.8	6.0	3.4	3.9	4.9	8.9	49	403	169	5.3	4.6	3.4
30	8.9	5.9	4.1	3.9	---	7.1	72	457	123	5.5	4.2	3.5
31	8.9	---	3.9	3.6	---	7.3	---	327	---	6.5	4.1	---
TOTAL	170.6	211.9	157.0	125.3	117.4	176.9	1238.5	5723	11069	596.3	143.7	113.63
MEAN	5.50	7.06	5.06	4.04	4.05	5.71	41.3	185	369	19.2	4.64	3.79
MAX	12	14	6.3	4.8	5.1	10	86	457	612	86	6.7	6.7
MIN	3.0	5.8	3.4	3.3	3.5	4.2	7.0	48	123	3.8	1.1	.28
AC-FT	338	420	311	249	233	351	2460	11360	21960	1180	285	225
a	154	140	177	199	187	207	146	169	352	416	368	252

CAL YR 1987 TOTAL 15708.8 MEAN 43.0 MAX 478 MIN 1.3 AC-FT 31160
WTR YR 1988 TOTAL 19848.23 MEAN 54.2 MAX 612 MIN .28 AC-FT 39370

a-Diversions, in acre-feet, by Mount Werner Water and Sanitation District, and City of Steamboat Springs.

09240900 ELK RIVER ABOVE CLARK, CO

LOCATION.--Lat 40°44'38", long 106°51'13", in SW¼SE¼ sec.13, T.9 N., R.85 W., Routt County, Hydrologic Unit 14050001, on right bank 0.4 mi upstream from Willow Creek, 1.8 mi downstream from Coulton Creek and 3.3 mi northeast of Clark, CO.

DRAINAGE AREA.--122 mi².

PERIOD OF RECORD.--October 1987 to September 1988.

GAGE.--Water-stage recorder. Elevation of gage is 7,525 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 16-17, Oct. 19 to Dec. 3, Dec. 9-10, Dec. 12-22, Dec. 24-31, Jan. 2-5, and Jan. 12 to Mar. 16. Records fair except for estimated daily discharges, which are poor. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,320 ft³/s, May 18, 1988, gage height, 6.03 ft; minimum daily, 17 ft³/s, Nov. 9, 10, 13, 1987.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,320 ft³/s at 0200 May 18, gage height, 6.03 ft; minimum daily, 17 ft³/s, Nov. 9, 10, 13.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	20	28	38	31	38	41	207	648	557	125	60
2	36	36	32	39	30	38	39	172	669	504	135	62
3	33	32	33	39	31	38	38	183	977	463	124	57
4	34	22	34	40	32	38	40	249	1390	436	132	56
5	34	19	36	40	33	38	42	326	1600	418	118	55
6	34	20	37	41	33	38	46	220	1610	370	106	54
7	33	20	39	41	34	38	69	204	1650	337	110	52
8	31	24	39	41	34	38	87	204	1600	296	111	50
9	33	17	40	40	34	38	69	257	1460	268	97	49
10	31	17	41	38	34	38	65	273	1450	247	86	50
11	31	19	42	38	35	38	63	331	1500	237	80	85
12	32	20	42	38	35	38	80	353	1250	228	81	106
13	30	17	41	37	35	38	102	566	1130	208	80	106
14	27	19	40	37	35	38	111	910	1010	198	79	100
15	30	19	40	36	35	38	110	1090	951	192	75	88
16	39	22	40	36	36	38	118	1160	967	187	95	78
17	32	24	40	35	36	39	121	1580	1140	174	86	78
18	25	27	40	34	36	40	124	1900	1120	164	94	74
19	29	28	39	34	36	39	127	1450	1250	155	81	70
20	23	27	39	33	36	38	135	761	1360	150	76	67
21	23	28	38	33	37	40	139	625	1370	127	79	63
22	23	29	38	33	37	40	127	563	1200	125	82	66
23	23	28	38	32	37	40	122	615	1120	138	74	69
24	31	27	37	32	37	38	127	756	1040	134	69	65
25	57	26	36	32	37	37	133	839	1040	129	66	63
26	43	25	37	32	37	37	124	870	969	126	63	62
27	32	26	38	32	37	38	134	1020	868	126	64	60
28	28	26	38	32	37	43	150	1200	862	127	63	66
29	26	26	38	32	37	50	182	1310	743	153	62	68
30	22	27	39	32	---	43	260	1210	650	130	61	75
31	22	---	38	32	---	40	---	813	---	122	58	---
TOTAL	963	717	1177	1109	1014	1210	3125	22217	34594	7226	2712	2054
MEAN	31.1	23.9	38.0	35.8	35.0	39.0	104	717	1153	233	87.5	68.5
MAX	57	36	42	41	37	50	260	1900	1650	557	135	106
MIN	22	17	28	32	30	37	38	172	648	122	58	49
AC-FT	1910	1420	2330	2200	2010	2400	6200	44070	68620	14330	5380	4070

WTR YR 1988 TOTAL 78118 MEAN 213 MAX 1900 MIN 17 AC-FT 154900

09239500 YAMPA RIVER AT STEAMBOAT SPRINGS, CO

LOCATION.--Lat 40°29'01", long 106°49'54", in NW¼NE¼ sec.17, T.6 N., R.84W., Routt County, Hydrologic Unit 14050001, on right bank 30 ft downstream from Fifth Street Bridge in Steamboat Springs and 0.6 mi upstream from Soda Creek.

DRAINAGE AREA.--604 mi².

PERIOD OF RECORD.--May 1904 to October 1906, October 1909 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 764: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 6,695.47 ft above National Geodetic Vertical Datum of 1929. Prior to May 8, 1905, nonrecording gage at bridge 0.2 mi upstream at datum 4.16 ft, higher. May 8, 1905, to Oct. 31, 1906, nonrecording gage on bridge 30 ft upstream at datum 0.44 ft, higher. Mar. 8, 1910, to Sept. 11, 1934, water-stage recorder at present site at datum 0.44 ft, higher.

REMARKS.--Estimated daily discharges: Apr. 14-25, Aug. 1-9, and Aug. 17 to Sept. 30. Records good except for estimated daily discharges, which are fair. Natural flow of stream affected by two diversions for irrigation to Egeria Creek in Colorado River basin, one diversion for irrigation from Trout Creek drainage to Oak Creek drainage, irrigation of about 19,700 acres upstream from station, and by storage reservoirs. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--81 years, 471 ft³/s; 341,200 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,820 ft³/s, June 14, 1921, gage height, 7.08 ft, present datum, from rating curve extended above 4,800 ft³/s; maximum gage height, 7.12 ft, June 25, 1984; minimum daily discharge, 4.0 ft³/s, Sept. 8, 1934, Sept. 10-13, 1944.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,000 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
June 7	2130	*3,140	*5.48	No other peak greater than base discharge.			

Minimum daily, 52 ft³/s, Sept. 8.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	68	155	68	67	73	77	104	1030	1950	468	120	68
2	70	168	64	79	73	78	117	1040	1910	394	115	66
3	68	164	65	80	74	79	132	899	2270	364	112	64
4	68	163	64	72	88	77	136	818	2580	346	110	60
5	67	167	64	71	92	75	138	777	2740	343	108	58
6	65	164	65	71	83	78	158	839	2640	341	106	56
7	66	164	65	72	79	73	204	854	2760	297	105	53
8	66	161	64	70	77	77	238	729	2700	254	104	52
9	65	150	64	70	75	80	199	703	2430	217	103	66
10	65	165	64	69	70	77	198	634	2380	202	103	70
11	66	161	66	70	70	75	281	578	2200	204	101	75
12	64	160	63	68	70	74	523	592	1970	200	101	80
13	66	164	63	78	73	75	787	801	1840	179	104	84
14	85	165	90	76	73	77	850	1160	1740	170	102	90
15	93	168	73	75	71	78	900	1530	1570	159	99	100
16	94	150	60	77	73	77	875	1710	1460	142	104	120
17	94	155	65	74	72	77	890	1860	1300	140	102	120
18	92	145	66	76	74	81	820	2030	1230	132	100	120
19	89	118	65	77	73	80	780	2470	1240	125	98	120
20	100	120	61	86	74	83	760	2610	1130	120	98	120
21	117	118	55	79	71	88	760	2180	1020	111	96	125
22	127	86	59	77	72	92	750	1720	940	105	96	125
23	128	80	60	76	74	92	750	1430	853	105	94	120
24	132	77	62	77	75	89	760	1350	730	105	94	125
25	153	76	65	76	76	86	750	1890	659	105	92	127
26	142	69	66	77	76	88	751	2070	581	106	90	129
27	146	65	66	79	76	108	692	2180	560	110	87	123
28	144	67	65	80	76	110	655	2290	583	118	86	126
29	145	67	67	81	76	102	683	2520	724	126	85	125
30	150	68	65	82	---	91	822	2610	626	128	84	125
31	155	---	67	73	---	94	---	2170	---	125	83	---
TOTAL	3050	3900	2016	2340	2179	2588	16463	46074	47316	6041	3082	2897
MEAN	98.4	130	65.0	75.5	75.1	83.5	549	1486	1577	195	99.4	96.6
MAX	155	168	90	86	92	110	900	2610	2760	468	120	129
MIN	64	65	55	67	70	73	104	578	560	105	83	52
AC-FT	6050	7740	4000	4640	4320	5130	32650	91390	93850	11980	6110	5750

CAL YR 1987 TOTAL 108303 MEAN 297 MAX 1910 MIN 42 AC-FT 214800
WTR YR 1988 TOTAL 137946 MEAN 377 MAX 2760 MIN 52 AC-FT 273600

09241000 ELK RIVER AT CLARK, CO

LOCATION.--Lat 40°43'03", long 106°54'55", in NW¼NW¼ sec.27, T.9 N., R.85 W., Routt County, Hydrologic Unit 14050001, on left bank 30 ft downstream from bridge on State Highway 129, 0.8 mi north of Clark, and 2.0 mi upstream from Cottonwood Gulch.

DRAINAGE AREA.--216 mi² (revised).

PERIOD OF RECORD.--May 1910 to September 1922 (published as "near Clark"), April 1930 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 1733: 1956.

GAGE.--Water-stage recorder. Datum of gage is 7,267.75 ft, (State Highway Department bench mark). May 1910 to September 1922, nonrecording gage at site 30 ft upstream at datum 0.15 ft, lower. Apr. 23, 1930, to Sept. 27, 1934, water-stage recorder at present site at datum 0.15 ft, lower.

REMARKS.--Estimated daily discharges: Nov. 16 to Apr. 8, Apr. 16 to May 12, and May 16 to June 6. Records good except for estimated daily discharges, which are poor. Diversions upstream from station for irrigation of about 230 acres upstream from and about 460 acres downstream from station. Natural flow of stream affected by storage in Lester Creek Reservoir (known also as Pearl Lake), capacity, 5,660 acre-ft, since 1963, and Steamboat Lake, capacity, 23,060 acre-ft, since 1968. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--70 years, 338 ft³/s; 244,900 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,910 ft³/s, May 23, 1984, gage height, 6.12 ft; minimum daily determined, 22 ft³/s, Dec. 12, 1963, but a lesser discharge may have occurred during periods of no gage-height record prior to 1939.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,900 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
May 18	----	a2,100	----	June 6	2300	*2,540	*4.7

Minimum daily discharge, 33 ft³/s, Sept. 9-10.
a-mean daily discharge

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	75	59	42	57	57	53	47	469	822	481	120	47
2	63	75	46	58	56	53	45	431	789	431	125	66
3	62	73	47	58	57	53	44	386	1030	404	110	92
4	64	62	48	59	58	50	47	533	1480	387	116	73
5	68	57	50	59	59	50	48	622	1670	376	101	76
6	68	60	51	60	59	50	48	509	1780	343	94	73
7	67	60	53	60	60	50	62	494	1820	319	100	43
8	67	54	53	60	60	47	74	499	1720	288	105	36
9	57	47	54	59	60	47	80	563	1610	268	90	33
10	67	47	55	57	60	47	73	536	1550	247	83	33
11	66	49	57	57	59	45	80	693	1470	255	73	57
12	66	47	57	57	59	45	111	531	1250	246	76	80
13	71	55	56	56	59	45	161	891	1170	222	76	81
14	110	54	55	56	59	45	205	1100	1090	210	72	77
15	93	51	55	55	59	45	263	1400	1100	201	69	67
16	79	51	56	55	58	45	278	1460	1110	193	91	59
17	72	46	56	55	58	45	289	1850	1160	181	81	53
18	70	41	56	55	58	46	297	2100	1150	171	89	53
19	69	42	56	56	58	45	306	1720	1210	160	75	50
20	63	41	55	56	58	44	326	1100	1240	152	67	48
21	63	43	55	57	57	46	335	980	1200	143	71	46
22	63	42	54	57	57	46	325	920	1160	137	72	51
23	63	42	54	58	57	46	326	960	1070	132	64	53
24	71	41	54	58	57	44	337	1070	950	129	59	48
25	97	40	54	58	57	43	348	1120	925	124	54	47
26	83	39	54	58	57	43	344	1140	888	123	52	45
27	72	40	55	58	57	44	360	1280	753	122	52	45
28	68	40	56	58	57	49	384	1450	728	120	50	48
29	66	40	56	58	57	56	431	1500	651	149	48	49
30	57	41	57	58	---	49	522	1400	566	129	48	53
31	62	---	56	58	---	46	---	983	---	118	45	---
TOTAL	2192	1479	1663	1781	1684	1462	6596	30700	35112	6961	2436	1682
MEAN	70.7	49.3	53.6	57.5	58.1	47.2	220	990	1170	225	78.6	56.1
MAX	110	76	57	60	60	56	522	2100	1820	481	128	92
MIN	57	39	42	55	56	43	44	386	566	118	45	33
AC-FT	4350	2930	3300	3530	3340	2900	13080	60890	69640	13810	4830	3340

CAL YR 1987 TOTAL 69945 MEAN 192 MAX 1050 MIN 39 AC-FT 138700
WTR YR 1988 TOTAL 93748 MEAN 256 MAX 2100 MIN 33 AC-FT 185900

09243700 MIDDLE CREEK NEAR OAK CREEK, CO

LOCATION.--Lat 40°23'08", long 106°59'33", in SW¼SW¼ sec.13, T.5 N., R.86 W., Routt County, Hydrologic Unit 14050001, on left bank 1.1 mi above mouth of Foidel Creek and 13.5 mi northwest of Oak Creek.

DRAINAGE AREA.--23.5 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1975 to September 1981, April 1982 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,720 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 23 to Mar. 9, and Apr. 6-12. Records good except for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--12 years (water years 1976-81, 83-88), 4.77 ft³/s; 3,460 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 329 ft³/s, May 14, 1984, gage height, 4.08 ft, from rating curve extended above 77 ft³/s; no flow many days each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 15 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Apr. 17	1945	19	2.05	May 20	0145	*20	*2.09
May 2	2245	17	2.03				

No flow many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.08	.56	.50	.49	.66	.82	5.7	16	9.2	2.3	.01	.00
2	.06	.69	.49	.50	.68	.84	6.2	17	8.5	2.1	.00	.00
3	.06	.66	.49	.50	.68	.86	6.5	16	7.9	2.1	.00	.00
4	.06	.55	.48	.52	.67	.92	6.8	16	7.5	2.4	.00	.00
5	.06	.51	.49	.52	.67	.96	7.1	16	7.1	3.0	.03	.00
6	.06	.50	.50	.54	.66	.98	7.3	15	6.8	2.5	.00	.00
7	.07	.48	.53	.54	.66	1.0	7.5	15	6.0	2.4	.00	.00
8	.09	.53	.51	.54	.65	1.1	7.8	15	5.9	1.9	.00	.00
9	.11	.42	.49	.56	.65	1.3	8.1	16	5.9	1.6	.00	.00
10	.11	.39	.52	.56	.65	1.2	8.5	14	5.5	1.4	.00	.00
11	.09	.44	.50	.58	.64	1.3	8.8	14	5.3	1.4	.00	.00
12	.09	.49	.51	.58	.64	1.4	9.3	14	5.2	1.3	.00	.12
13	.14	.51	.46	.60	.64	1.6	12	14	4.9	1.1	.17	.61
14	.26	.57	.42	.60	.63	1.7	12	14	4.9	.78	.10	.51
15	.36	.66	.41	.61	.63	1.8	14	14	4.7	.54	.12	.51
16	.27	.52	.41	.62	.64	2.0	15	13	4.6	.44	.54	.51
17	.24	.46	.43	.62	.64	2.2	17	13	4.5	.36	.29	.49
18	.23	.45	.43	.63	.65	2.3	16	15	4.4	.28	.17	.44
19	.23	.43	.43	.63	.64	2.6	16	16	4.2	.26	.23	.38
20	.21	.39	.44	.64	.64	2.8	18	17	3.8	.23	.14	.33
21	.26	.43	.44	.64	.63	2.9	18	16	3.5	.15	.11	.26
22	.23	.37	.45	.65	.63	3.1	17	16	3.1	.14	.05	.26
23	.30	.40	.45	.65	.65	3.3	15	15	2.1	.13	.01	.28
24	.25	.42	.46	.66	.68	3.5	14	15	1.5	.11	.00	.28
25	.85	.44	.46	.66	.70	3.7	14	14	1.2	.10	.00	.28
26	.60	.46	.47	.68	.72	4.1	14	14	1.2	.06	.00	.26
27	.41	.43	.47	.68	.74	4.3	14	13	2.1	.06	.00	.26
28	.38	.46	.47	.69	.76	4.7	13	11	3.1	.06	.00	.26
29	.40	.48	.48	.68	.78	5.0	13	9.6	3.0	.05	.00	.26
30	.53	.51	.48	.68	---	5.2	13	9.5	2.4	.05	.00	.27
31	.61	---	.48	.66	---	5.5	---	9.5	---	.05	.00	---
TOTAL	7.70	14.61	14.55	18.71	19.31	74.98	354.6	442.6	140.0	29.35	1.97	6.57
MEAN	.25	.49	.47	.60	.67	2.42	11.8	14.3	4.67	.95	.064	.22
MAX	.85	.69	.53	.69	.78	5.5	18	17	9.2	3.0	.54	.61
MIN	.06	.37	.41	.49	.63	.82	5.7	9.5	1.2	.05	.00	.00
AC-FT	15	29	29	37	38	149	703	878	278	58	3.9	13

CAL YR 1987 TOTAL 658.61 MEAN 1.80 MAX 11 MIN .00 AC-FT 1310
WTR YR 1988 TOTAL 1124.95 MEAN 3.07 MAX 18 MIN .00 AC-FT 2230

09243700 MIDDLE CREEK NEAR OAK CREEK, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--September 1975 to September 1988 (discontinued).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1976 to September 1981.
WATER TEMPERATURES: April 1976 to September 1981.

INSTRUMENTATION.--Water-quality monitor April 1976 to September 1981.

REMARKS.--Unpublished maximum and minimum specific-conductance data for period of daily record available in district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 1,380 microsiemens May 29, 1981; minimum, 117 microsiemens Aug. 10, 1978.
WATER TEMPERATURES: Maximum, 31.5°C July 31, 1976; minimum, freezing point on many days during winter months.

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)
OCT												
29...	1045	0.38	971	8.7	5.5	9.8	430	99	45	50	1	4.0
FEB												
22...	1400	0.63	855	8.4	0.0	12.6	400	94	40	45	1	3.1
APR												
19...	1335	16	--	8.1	--	9.0	260	61	27	19	0.5	3.1
JUL												
27...	0950	0.07	911	8.4	15.5	7.7	380	82	43	42	1	3.3

DATE	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)
OCT												
29...	274	250	6.9	0.2	8.4	628	628	0.85	0.64	14	<0.01	<0.1
FEB												
22...	277	200	5.1	0.3	9.9	578	564	0.79	0.98	5	<0.01	0.17
APR												
19...	148	180	4.2	0.2	8.4	408	393	0.55	17.7	260	<0.01	0.38
JUL												
27...	256	220	6.0	0.1	5.1	530	555	0.79	0.11	33	<0.01	<0.1

DATE	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	PHOS-PHOROUS ORTHO, DIS-SOLVED (MG/L AS P)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)	SELE-NIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)
OCT											
29...	0.040	<0.01	50	<1	500	200	<0.1	1	<1	<1	<10
FEB											
22...	0.059	<0.01	30	1	230	210	<0.1	2	<1	<1	10
APR											
19...	0.034	0.02	30	<1	9500	470	<0.1	1	1	<1	50
JUL											
27...	0.083	0.01	50	<1	160	100	<0.1	3	1	<1	<10

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)
OCT					
02...	0945	0.05	845	8.8	4.0
NOV					
23...	1335	0.40	993	8.9	0.5
DEC					
14...	1100	0.37	847	8.1	0.5
JAN					
28...	1330	0.69	780	8.7	0.5
MAR					
08...	1115	1.1	742	8.2	0.5
APR					
12...	1100	9.9	--	8.8	--
MAY					
10...	1030	15	520	9.0	10.0
AUG					
18...	1025	0.18	808	8.9	18.0

09243800 FOIDEL CREEK NEAR OAK CREEK, CO

LOCATION.--Lat 40°20'45", long 107°05'04", in NW¼SW¼ sec.31, T.5 N., R.86 W., Routt County, Hydrologic Unit 14050001, on right bank 2.3 mi downstream from Reservoir No. 1, 6.9 mi upstream from mouth, and 8.7 mi northwest of Oak Creek.

DRAINAGE AREA.--8.61 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1975 to October 1981, April 1982 to September 1983, October 1984 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,880 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 2 to Apr. 7, Apr. 21 to May 10, and June 12-13. Records fair except for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--11 years (water years 1976-81, 1983, 1985-88), 1.46 ft^3/s; 1,060 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 55 ft^3/s, Apr. 21, 1980, gage height, 3.38 ft; no flow many days most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 41 ft^3/s, at 1300 Apr. 16, gage height, 2.89 ft; minimum daily, 0.09 ft^3/s, Oct. 6-7.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.35	.51	.48	.48	.36	.49	6.0	5.8	2.7	3.1	.49	.28
2	.32	.53	.48	.47	.37	.47	6.0	6.8	2.5	2.8	.45	.24
3	.32	.54	.50	.46	.38	.46	7.0	6.6	2.4	2.7	.43	.24
4	.37	.51	.51	.46	.38	.43	9.0	6.4	2.2	2.9	.50	.26
5	.29	.50	.51	.46	.39	.48	10	6.2	2.0	3.9	.47	.25
6	.09	.50	.52	.45	.39	.60	12	5.8	1.7	3.1	.47	.26
7	.09	.50	.52	.45	.42	.70	10	6.2	1.5	2.6	.55	.25
8	.10	.50	.52	.44	.42	.80	8.7	5.8	1.4	2.2	.54	.22
9	.11	.49	.54	.43	.40	1.0	7.4	5.5	1.3	2.1	.44	.21
10	.11	.45	.53	.43	.40	1.4	7.5	5.3	1.4	2.0	.39	.22
11	.13	.55	.54	.43	.43	1.6	8.0	6.4	1.3	1.8	.35	.38
12	.15	.46	.55	.42	.42	1.7	10	6.0	1.2	1.7	.44	1.9
13	.17	.50	.56	.42	.44	1.8	20	5.9	1.3	1.5	.72	2.2
14	.24	.50	.60	.41	.43	1.9	23	5.7	1.2	1.3	.57	1.4
15	.27	.60	.58	.40	.44	2.0	23	5.4	1.2	1.1	.49	.87
16	.26	.45	.56	.40	.45	2.2	26	5.2	1.1	.97	.59	.56
17	.27	.43	.56	.40	.46	2.3	15	5.2	1.1	.87	.52	.45
18	.25	.42	.55	.39	.46	2.5	13	5.7	1.1	.77	.44	.39
19	.26	.45	.54	.38	.47	2.7	12	6.3	1.1	.63	.40	.35
20	.27	.44	.54	.38	.43	2.8	7.7	5.7	1.1	.54	.38	.34
21	.28	.44	.54	.36	.50	3.0	6.6	5.3	1.2	.48	.43	.34
22	.27	.41	.53	.35	.54	3.2	7.6	4.9	1.7	.44	.40	.33
23	.28	.43	.53	.35	.52	3.5	6.5	4.3	1.3	.44	.36	.32
24	.33	.43	.52	.34	.55	3.6	5.8	4.2	1.2	.49	.32	.31
25	.61	.43	.51	.33	.60	3.8	5.2	4.1	1.2	.48	.30	.32
26	.54	.44	.51	.33	.70	4.2	5.0	3.8	1.7	.42	.29	.31
27	.49	.45	.51	.32	.60	4.4	5.0	3.7	2.7	.56	.31	.31
28	.42	.47	.51	.31	.55	4.8	4.9	3.5	3.4	.41	.33	.31
29	.39	.47	.50	.33	.50	5.0	4.8	3.4	4.0	.41	.33	.31
30	.44	.47	.50	.34	---	5.0	4.9	3.2	3.6	.44	.30	.31
31	.51	---	.50	.34	---	5.0	---	3.0	---	.48	.28	---
TOTAL	8.98	14.27	16.35	12.26	13.45	73.83	297.5	161.3	52.8	43.63	13.28	14.44
MEAN	.29	.48	.53	.40	.46	2.38	9.92	5.20	1.76	1.41	.43	.48
MAX	.61	.60	.60	.48	.70	5.0	26	6.8	4.0	3.9	.72	2.2
MIN	.09	.41	.48	.31	.36	.43	4.8	3.0	1.1	.41	.28	.21
AC-FT	18	28	32	24	27	146	590	320	105	87	26	29

CAL YR 1987 TOTAL 407.34 MEAN 1.12 MAX 6.5 MIN .09 AC-FT 808
WTR YR 1988 TOTAL 722.09 MEAN 1.97 MAX 26 MIN .09 AC-FT 1430

09243800 FOIDEL CREEK NEAR OAK CREEK, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--September 1975 to September 1983, October 1984 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: May 1976 to September 1981, April 1982 to September 1983. March 1986 to current year.
WATER TEMPERATURES: May 1976 to September 1981, April 1982 to September 1983. March 1986 to current year.

INSTRUMENTATION.--Water-quality monitor May 1976 to September 1981, April 1982 to September 1983. March 1986 to current year.

REMARKS.--Unpublished maximum and minimum specific conductance data for periods of daily record available in district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 3,080 microsiemens Dec. 16, 1987; minimum, 200 microsiemens Apr. 21, 22, 1980.
WATER TEMPERATURES: Maximum, 31.5°C July 30, 1983; minimum, 0.0°C during winter period when flowing each year.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 3,080 microsiemens Dec. 16; minimum, 620 microsiemens Apr. 16.
WATER TEMPERATURES: Maximum, 27.0°C June 24; minimum, 0.0°C several days during winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)
OCT												
29...	1315	0.40	2610	8.4	7.0	9.5	1600	390	190	[illegible]	[illegible]	[illegible]
FEB												
22...	1450	0.55	2560	8.4	0.0	12.1	1330	310	160	[illegible]		[illegible]
APR												
19...	1010	12	976	8.0	7.0	9.1	510	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
JUL												
27...	1215	0.48	2690	8.1	20.5	7.0	1700	[illegible]	[illegible]	[illegible]	[illegible]	5.6

DATE	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)
OCT												
29...	170	1500	13	0.2	7.6	2330	2170	3.22	2.54	9	<0.01	<0.1
FEB												
22...	117	1400	28	0.2	10	2170	2120	2.95	3.22	[illegible]	0.01	0.53
APR												
19...	158	390	4.4	0.2	7.5	721	694	0.98	23.4	[illegible]	<0.01	0.62
JUL												
27...	257	1500	6.7	0.2	3.4	2400	2250	3.26	3.11	[illegible]	<0.01	<0.1

DATE	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	PHOS-PHOROUS ORTHO, DIS-SOLVED (MG/L AS P)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)	SELE-NIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)
OCT											
29...	0.18	<0.01	120	<1	290	160	<0.1	<1	<1	<1	<1
FEB											
22...	0.28	0.11	120	2	480	370	<0.1	4	<1	<1	<1
APR											
19...	0.03	0.02	50	<1	1100	160	<0.1	<1	1	1	1
JUL											
27...	0.27	0.01	120	<1	110	130	<0.1	4	<1	<1	<1

09243800 FOIDEL CREEK NEAR OAK CREEK, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)
OCT					
02...	1120	0.34	2600	8.8	5.0
NOV					
23...	1200	0.43	2670	8.8	0.5
DEC					
14...	1145	0.60	--	7.8	0.5
JAN					
28...	1205	0.31	--	8.6	0.0
MAR					
08...	1345	0.81	--	8.1	0.5
APR					
11...	1440	3.0	--	8.5	--
MAY					
14...	1250	4.9	--	8.8	--
JUN					
13...	1330	1.3	2550	9.2	18.0
AUG					
18...	1210	0.54	2690	8.4	18.0

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2540	2610	2740	2630	2730	2560	2140	2080	2490	2390	2690	2740
2	2540	2590	2680	2670	2730	2530	2120	2110	2500	2390	2700	2740
3	[illegible]	[illegible]	[illegible]	2730	2740	[illegible]	1970	2080	2500	2390	2690	2750
4	[illegible]	2610	2630	2730	2750	2530	1730	2160	2500	2380	2680	2770
5	[illegible]	2610	2650	2760	2740	2540	1330	2210	2500	2390	2700	2770
6	2550	2610	2630	2800	2730	2590	1240	2240	2520	2380	2690	2770
7	2550	2600	2660	2810	2730	2600	1140	2270	2540	2390	2680	2770
8	2540	2600	2650	2770	2730	2590	994	2240	2540	2420	2690	2790
9	2510	2610	2690	2760	2730	2570	1050	2230	2550	2450	2710	2790
10	2500	2600	2650	2750	2730	2610	1090	2290	2550	2470	2720	2790
11	2520	2590	2630	2730	2730	2620	1060	2320	2580	2470	2720	2760
12	2570	2600	2740	2750	2720	2630	978	2340	2540	2490	2710	2690
13	2510	2590	2750	2730	2710	2640	946	2370	2560	2490	2710	2550
14	2520	2590	2820	2700	2710	2650	883	2390	2560	2460	2710	2570
15	2510	2570	2920	2670	2710	2640	836	2410	2570	2450	2690	2590
16	2510	2630	2910	2690	2680	2640	765	2410	2590	---	2670	2580
17	2520	2610	2840	2700	2660	2650	844	2420	2600	---	2690	2590
18	2500	2690	2770	2700	2670	2650	940	2380	2600	---	2690	2590
19	2500	2700	2720	2710	2680	2660	950	2290	2600	---	2700	2600
20	2530	2680	2720	2690	2670	2640	1060	2270	2610	---	2700	2600
21	2520	2690	2750	2700	2670	2570	1190	2350	2580	---	2690	2600
22	2530	2670	2760	2700	2670	2520	1380	2370	2540	---	2700	2590
23	2520	2590	2800	2690	2630	2420	1570	2390	---	---	2710	2600
24	2480	2610	2890	2700	2690	2430	1670	2390	---	---	2710	2600
25	2470	2700	2930	2690	2670	2440	1720	2400	---	---	2720	2610
26	2490	2660	2850	2710	2660	2430	1680	2400	---	---	2720	2610
27	2490	2630	2830	2710	2620	2220	1740	2400	2530	---	2720	2610
28	2500	2710	2800	2720	2560	1990	1820	2420	2480	2670	2720	2630
29	2540	2730	2730	2730	2530	1950	1870	2420	2380	2680	2730	2630
30	2600	2740	2720	2730	---	2030	1960	2470	2390	2680	2730	2640
31	2610	---	2720	2730	---	2110	---	2480	---	2690	2730	---

09243800 FOIDEL CREEK NEAR OAK CREEK, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	12.2	3.2	9.5	6.0	.1	.0	.2	.1	.1	.0	.4	.0
2	12.3	3.5	10.4	6.4	.1	.1	.2	.0	.1	.0	.4	.4
3	11.9	3.5	9.0	6.4	.1	.1	.1	.0	.1	.0	.5	.3
4	14.7	3.6	9.2	4.0	.2	.1	.1	.0	.2	.1	.4	.0
5	12.0	4.5	8.2	2.2	.2	.1	.1	.0	.2	.1	.4	.0
6	11.5	3.0	8.5	5.0	1.0	.2	.1	.0	.2	.1	.4	.0
7	11.5	2.5	5.9	4.3	1.0	.0	.1	.0	.2	.2	.4	.0
8	11.2	3.5	7.6	3.2	.5	.0	.1	.0	.2	.1	.4	.0
9	11.1	3.5	5.9	.0	.3	.1	.1	.0	.2	.1	.4	.0
10	11.5	5.0	3.3	.0	.3	.1	.1	.1	.2	.1	.4	.0
11	10.2	2.1	4.4	.0	1.0	.1	.1	.1	.2	.2	.4	.0
12	9.0	1.2	4.3	.1	.1	.0	.1	.0	.3	.2	.4	.0
13	9.4	7.6	5.4	1.1	.3	.0	.2	.1	.3	.2	.4	.0
14	9.0	6.0	4.9	2.4	.3	.1	.2	.1	.3	.2	.4	.0
15	11.4	7.4	3.0	.0	.2	.0	.2	.1	.2	.2	.4	.0
16	10.2	5.1	.5	.0	.2	.0	.4	.1	.3	.3	.4	.0
17	9.2	2.0	.2	.1	.3	.1	.1	.1	.4	.0	.4	.0
18	8.3	2.5	.3	.1	.3	.2	.1	.1	.4	.0	.4	.0
19	8.0	2.0	.3	.1	.4	.2	.2	.1	.9	.0	.4	.0
20	7.2	.0	.3	.1	.2	.1	.2	.1	.5	.0	.4	.0
21	7.1	.0	.2	.1	.1	.1	.2	.1	.9	.0	.4	.0
22	7.5	.0	.2	.1	.1	.1	.2	.1	.9	.0	.4	.0
23	6.7	.0	.3	.1	.1	.0	.2	.1	.9	.0	.4	.0
24	8.6	4.5	.1	.1	.1	.0	.2	.1	.9	.0	.4	.0
25	9.2	6.1	1.1	.0	.1	.0	.2	.0	.5	.0	.3	.0
26	9.1	4.0	.2	.0	.1	.0	.2	.1	.5	.0	.4	.0
27	9.4	2.0	.1	.1	.1	.0	.2	.1	.5	.0	.4	.0
28	9.0	1.0	.1	.1	.1	.1	.2	.1	.4	.0	.4	.0
29	9.3	2.0	.2	.1	.1	.1	.2	.1	.4	.0	.3	.0
30	7.1	5.6	.1	.0	.1	.1	.2	.1	---	---	.3	.0
31	9.5	5.3	---	---	.1	.1	.2	.0	---	---	.3	.3
MONTH	14.7	.0	10.4	.0	1.0	.0	.4	.0	.9	.0	.5	.0

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	.3	.0	10.9	7.4	17.2	10.3	25.5	15.6	21.5	15.2	20.7	11.9
2	.3	.0	10.2	5.6	21.4	11.6	24.4	16.2	21.5	14.5	20.7	11.9
3	.3	.0	13.8	4.5	23.2	12.0	23.3	16.3	22.8	17.4	20.6	11.0
4	.3	.3	14.6	6.0	23.9	13.4	21.5	16.0	23.4	16.8	20.4	11.4
5	.5	.0	14.2	6.6	22.0	15.4	22.7	15.1	23.0	14.3	19.4	9.8
6	.6	.0	11.5	6.7	24.4	13.7	23.7	16.7	20.0	16.6	18.2	9.0
7	.7	.2	12.2	5.3	23.9	13.5	23.4	16.3	21.1	14.9	18.6	10.6
8	1.8	.0	9.4	5.7	24.8	13.6	24.3	15.9	20.5	14.1	19.1	10.1
9	2.6	.0	11.9	5.7	23.2	13.2	22.4	15.4	20.9	13.3	18.1	8.9
10	4.0	.0	12.2	7.3	23.5	14.7	20.2	14.8	21.4	13.2	15.7	10.7
11	5.3	.1	16.8	6.1	19.6	14.4	21.9	14.0	22.0	13.9	13.2	10.8
12	5.9	.0	18.4	3.2	22.8	12.7	20.3	15.0	19.8	16.1	12.6	10.1
13	5.0	.0	19.6	9.5	20.0	14.2	24.1	14.9	20.9	13.3	14.1	10.7
14	6.5	1.0	19.1	10.6	21.6	12.3	24.6	16.8	22.0	13.7	13.1	9.9
15	7.4	1.0	20.1	10.5	22.6	12.9	22.4	16.0	19.4	15.0	13.6	9.2
16	9.8	1.5	20.4	11.0	23.7	13.2	23.8	15.5	22.6	16.5	15.1	7.6
17	7.9	3.2	18.4	13.0	20.0	13.6	23.1	15.4	20.2	16.3	15.4	8.9
18	11.5	3.3	17.1	12.5	23.5	13.8	23.5	14.4	21.9	14.5	12.6	8.5
19	11.7	6.3	12.9	10.7	23.8	14.9	23.4	14.3	22.6	14.2	12.5	5.5
20	12.0	5.7	14.2	9.7	25.3	15.4	23.5	13.8	19.0	13.4	14.1	6.5
21	10.1	6.6	15.4	8.6	25.6	16.0	23.7	13.0	20.7	16.1	14.5	9.8
22	10.3	6.3	17.8	8.8	25.0	16.7	23.8	13.0	21.8	15.0	12.4	9.7
23	10.7	4.5	20.1	9.5	26.6	16.1	22.2	14.4	22.4	12.7	14.0	7.8
24	9.8	5.0	21.0	11.0	27.0	16.7	23.8	13.9	22.3	12.7	14.2	7.9
25	8.4	3.9	17.4	11.5	26.7	17.6	23.6	14.5	22.2	12.5	13.9	8.3
26	11.6	2.3	17.4	10.8	24.1	17.0	23.3	16.5	20.2	12.4	12.7	7.7
27	12.3	5.1	19.3	11.3	26.2	16.8	22.7	15.6	22.1	14.1	12.5	8.7
28	11.6	5.5	20.0	11.4	22.9	18.0	22.9	15.4	21.1	12.8	10.5	7.2
29	14.6	6.7	19.3	11.5	23.8	17.8	24.5	15.1	20.9	12.3	10.6	4.6
30	16.5	7.1	15.2	11.3	25.0	16.1	24.4	14.9	20.3	13.0	12.1	6.0
31	---	---	16.4	9.7	---	---	24.2	16.9	19.7	12.1	---	---
MONTH	16.5	.0	21.0	4.5	27.0	10.3	25.5	13.0	23.4	12.1	20.7	4.6

YEAR MAXIMUM 27.0 MINIMUM .0

09243900 FOIDEL CREEK AT MOUTH, NEAR OAK CREEK, CO

LOCATION.--Lat 40°23'25", long 106°53'39", in SE¼SE¼ sec.14, T.5 N., R.86 W., Routt County, Hydrologic Unit 14050001, on left bank 0.9 mi upstream from mouth and 13.6 mi northwest of Oak Creek.

DRAINAGE AREA.--17.5 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1975 to September 1981, June 1982 to current year.

REVISED RECORDS.--WDR CO-78-3: 1976 (M), 1976.

GAGE.--Water-stage recorder. Elevation of gage is 6,730 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 21 to Apr. 7. Records fair except for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--12 years (water years 1976-81, 1983-88), 3.61 ft³/s; 2,620 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 90 ft³/s, Apr. 22, 1980, gage height, 5.18 ft; no flow many days most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 60 ft³/s at 2200 Apr. 14, gage height, 4.34 ft; minimum daily, 0.02 ft³/s, Sept. 10.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.27	1.1	.77	.83	.96	.98	12	8.4	3.6	3.7	.52	.25
2	.47	1.2	.77	.86	.94	.94	13	8.9	3.0	2.5	.68	.21
3	.53	1.1	.77	.87	.98	.92	15	9.9	2.4	2.3	.56	.14
4	.38	1.1	.76	.87	.99	.97	18	8.8	2.0	1.9	.65	.10
5	.38	1.2	.76	.86	1.0	1.1	24	8.2	1.9	5.1	.57	.04
6	.63	1.2	.76	.84	1.0	1.7	28	7.8	1.7	4.0	.57	.22
7	.65	1.1	.75	.84	1.1	2.0	29	7.6	1.5	2.7	.55	.31
8	.66	1.0	.75	.85	1.2	2.2	30	8.2	1.3	1.8	.63	.12
9	.60	.95	.75	.86	1.2	3.4	22	9.2	1.7	1.5	.53	.04
10	.60	.90	.74	.87	1.1	3.0	17	8.6	1.5	1.3	.68	.02
11	.55	1.1	.74	.89	1.1	3.2	20	7.8	1.4	1.5	.47	.18
12	.57	.95	.73	.91	1.1	3.4	27	7.4	1.5	1.2	.38	1.1
13	.72	1.0	.73	.91	1.2	3.6	36	7.0	1.4	.92	.55	2.9
14	.96	1.0	.72	.91	1.1	3.8	43	6.5	1.5	.76	.71	2.4
15	1.0	1.2	.70	.91	1.1	4.0	43	6.1	1.4	.67	.89	1.6
16	1.0	.89	.70	.91	1.1	4.4	37	5.7	1.5	.69	1.3	1.0
17	.96	.99	.74	.91	1.1	4.6	30	5.8	1.1	.61	.82	.85
18	.89	.84	.78	.91	1.0	5.0	21	7.9	1.1	.54	.76	.75
19	.84	.93	.81	.91	1.0	5.4	19	11	1.1	.49	.66	.70
20	.82	.88	.83	.91	1.0	5.6	18	12	.91	.45	.57	.66
21	.78	.87	.83	.93	1.0	6.0	16	8.4	1.0	.38	.60	.59
22	.82	.82	.83	.95	1.0	6.4	15	7.1	2.2	.40	.57	.60
23	.83	.79	.83	.96	1.1	7.0	13	6.3	2.4	.39	.59	.61
24	.92	.80	.83	.93	1.1	7.4	12	5.5	1.6	.33	.44	.61
25	1.4	.80	.83	.98	1.3	7.8	12	5.0	1.3	.33	.43	.59
26	1.2	.80	.83	.99	1.5	8.4	13	5.2	1.4	.27	.32	.56
27	1.0	.79	.83	.99	1.3	8.8	12	4.6	5.4	.66	.35	.56
28	.98	.79	.83	1.0	1.1	9.8	10	3.9	9.9	.55	.27	.56
29	1.2	.78	.83	1.0	1.0	10	9.4	3.7	9.0	.43	.30	.56
30	1.1	.78	.83	1.0	---	11	8.8	3.8	5.6	.49	.32	.54
31	1.1	---	.83	.98	---	11	---	3.8	---	.43	.28	---
TOTAL	24.81	28.65	24.19	28.39	31.67	153.71	623.2	220.1	73.31	39.29	17.52	19.37
MEAN	.80	.95	.78	.92	1.09	4.96	20.8	7.10	2.44	1.27	.57	.65
MAX	1.4	1.2	.83	1.0	1.5	11	43	12	9.9	5.1	1.3	2.9
MIN	.27	.78	.70	.83	.94	.87	8.8	3.7	.91	.27	.27	.02
AC-FT	49	57	48	56	63	305	1240	437	145	78	35	38

CAL YR 1987 TOTAL 1062.28 MEAN 2.91 MAX 35 MIN .03 AC-FT 2110
WTR YR 1988 TOTAL 1284.21 MEAN 3.51 MAX 43 MIN .02 AC-FT 2550

09243900 FOIDEL CREEK AT MOUTH NEAR OAK CREEK, CO--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1976 to September 1981, June 1982 to September 1988, (discontinued).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1976 to September 1981.
WATER TEMPERATURE: April 1976 to September 1981.
SUSPENDED SEDIMENT DISCHARGE: April 1976 to September 1981.

INSTRUMENTATION.--Water-quality monitor April 1976 to September 1981. Automatic pumping sampler April 1976 to September 1981.

REMARKS.--Unpublished maximum and minimum specific conductance data for period of daily record available in district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 3,520 microsiemens Aug. 10, 11, 1980; minimum, 255 microsiemens July 1, 1980.
WATER TEMPERATURES: Maximum, 28.5°C July 22, 1980; minimum, 0.0°C several days during winter period each year.
SEDIMENT CONCENTRATIONS: Maximum daily, 3,650 mg/L Apr. 2, 1981; no flow many days most years.
SEDIMENT LOADS: Maximum daily, 702 tons Apr. 23, 1980; no flow many days most years.

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)
OCT												
29...	1000	1.2	2850	8.2	5.5	10.0	1400	260	180	150	2	6.2
FEB												
22...	1230	1.0	2780	8.2	0.0	13.1	1500	340	170	62	0.7	5.2
APR												
19...	1145	19	1430	8.0	9.5	9.5	720	150	83	45	0.8	5.0
JUL												
27...	1045	0.66	3120	8.0	17.5	6.5	1700	290	230	180	2	7.9

DATE	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)
OCT												
29...	268	1500	17	0.2	4.2	2300	2280	3.35	7.97	8	<0.01	<0.1
FEB												
22...	415	1400	29	0.2	12	2380	2270	3.24	6.49	3	<0.01	0.50
APR												
19...	205	630	7.1	0.2	8.4	1100	1060	1.50	57.3	69	0.01	0.78
JUL												
27...	214	1900	20	0.1	2.5	2220	2760	3.02	3.96	18	<0.01	0.11

DATE	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	PHOS-PHOROUS ORTHO, DIS-SOLVED (MG/L AS P)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)	SELE-NIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)
OCT											
29...	0.15	<0.01	140	1	380	140	<0.1	1	<1	<1	<10
FEB											
22...	0.14	0.01	90	1	140	450	<0.1	2	<1	<1	<10
APR											
19...	0.06	0.02	80	1	2100	290	<0.1	1	1	<1	30
JUL											
27...	0.28	0.02	150	<1	510	400	<0.1	5	<1	<1	<10

09243900 FOIDEL CREEK AT MOUTH NEAR OAK CREEK, CO--CONTINUED

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)
OCT					
02...	0845	0.38	2590	8.4	2.5
NOV					
23...	1415	0.79	2550	8.7	0.5
DEC					
14...	1000	0.74	1800	7.9	0.5
JAN					
28...	1410	1.0	2320	8.8	0.5
MAR					
04...	1000	0.87	1840	8.6	2.0
APR					
07...	1420	29	1060	8.4	3.0
12...	1215	21	--	8.5	7.0
MAY					
10...	0925	8.3	2260	8.4	9.5
AUG					
18...	0927	0.74	2670	8.3	16.5

RAINFALL RECORDS

PERIOD OF RECORD.--July 19, 1978 to current year.

INSTRUMENTATION.--Belfort weighing bucket rain gage.

REMARKS.--Unpublished rainfall data for water years 1978-86 are available in district office.

RAINFALL ACCUMULATED (INCHES), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.23	.00	.07	.19	.00	.00	.13	.00	.00	.00	.00
2	.00	.14	.03	.01	.22	.05	.00	.04	.00	.00	.00	.00
3	.00	.00	.00	.01	.02	.07	.00	.00	.00	.00	.15	.00
4	.00	.00	.00	.17	.02	.00	.00	.00	.00	.19	.00	.00
5	.00	.00	.18	.14	.00	.08	.06	.00	.00	.00	.00	.00
6	.00	.00	.02	.27	.00	.00	.00	.00	.00	.01	.00	.00
7	.00	.00	.08	.05	.00	.02	.00	.13	.00	.00	.02	.00
8	.00	.00	.01	.23	.12	.02	.00	.03	.00	.00	.00	.00
9	.00	.00	.03	.40	.15	.00	.00	.00	.00	.00	.00	.00
10	.00	.00	.11	.16	.00	.00	.00	.00	.02	.00	.00	.00
11	.00	.12	.00	.23	.01	.03	.00	.00	.02	.00	.00	.90
12	.00	.00	.00	.05	.00	.02	.00	.00	.00	.00	.11	.64
13	.14	.00	.00	.02	.04	.00	.00	.00	.03	.00	.00	.05
14	.09	.02	.00	.04	.00	.00	.00	.00	.01	.00	.00	.02
15	.04	.04	.00	.02	.00	.00	.00	.00	.00	.00	.65	.00
16	.00	.03	.00	.03	.00	.00	.00	.00	.00	.00	.00	.00
17	.00	.05	.00	.15	.01	.00	.00	.58	.01	.01	.00	.00
18	.00	.02	.05	.43	.00	.04	.00	.44	.00	.00	.00	.00
19	.00	.01	.07	.01	.00	.03	.09	.53	.00	.00	.00	.00
20	.00	.00	.00	.01	.00	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.07	.09	.00	.00	.05	.00	.25	.04	.00	.00
22	.00	.00	.48	.01	.00	.00	.01	.00	.00	.00	.00	.01
23	.00	.16	.25	.01	.00	.00	.04	.00	.00	.00	.00	.00
24	.44	.04	.04	.00	.07	.00	.04	.00	.00	.00	.00	.00
25	.08	.00	.01	.00	.03	.06	.28	.04	.00	.00	.00	.00
26	.00	.00	.00	.12	.19	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.10	.00	.00	.00	.00	.00	.08	.00	.00	.00
28	.00	.00	.02	.00	.04	.00	.00	.00	1.28	.00	.00	.00
29	.00	.00	.01	.03	.00	.00	.00	.00	.00	.00	.00	.00
30	.16	.00	.05	.05	---	.00	.00	.08	.00	.00	.00	.00
31	.01	---	.05	.43	---	.00	---	.00	---	.03	.00	---
TOTAL	0.96	0.86	1.66	3.24	1.11	0.42	0.57	2.00	1.70	0.28	0.93	1.62
MAX	.44	.23	.48	.43	.22	.08	.28	.58	1.28	.19	.65	.90
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

WTR YR 1988 TOTAL 15.35 MEAN .04 MAX 1.28 MIN .00

09245000 ELKHEAD CREEK NEAR ELKHEAD, CO

LOCATION.--Lat 40°40'11", long 107°17'04", in NW¼NE¼ sec.8, T.8 N., R.88 W., Routt County, Hydrologic Unit 14050001, on right bank 0.2 mi upstream from North Fork Elkhead Creek, 4.5 mi northwest of Elkhead, and 12 mi north of Hayden.

DRAINAGE AREA.--64.2 mi².

PERIOD OF RECORD.--January to November 1910 and May to November 1920 (monthly discharge only, published in WSP 1313; published as "at Hayes Ranch"), April 1953 to current year.

REVISED RECORDS.--WSP 1733: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 6,845 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Nov. 30, 1920, nonrecording gage or water-stage recorder 675 ft upstream at different datum.

REMARKS.--Estimated daily discharges: Dec. 16 to Jan. 7. Records good except for estimated daily discharges, which are poor. No diversion upstream from station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--35 years (water years 1954-88), 57.7 ft³/s; 41,800 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,850 ft³/s, May 20, 1984, gage height, 7.58 ft, from rating curve extended above 1,500 ft³/s, on basis of slope area determination of peak flow; no flow Sept. 1, 1954, Sept. 12-19, 24, 1955, Aug. 27-29, 1961, Aug. 14-19, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 800 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
May 18	0300	*784	*5.66				

Minimum daily, 0.68 ft³/s, Sept. 9.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.0	7.5	7.7	6.0	6.4	12	23	455	134	15	3.7	.90
2	3.3	15	8.7	6.5	6.4	11	26	276	123	13	3.5	.95
3	3.1	16	9.5	7.0	6.3	8.7	27	213	117	12	3.5	.90
4	3.0	9.2	9.8	7.5	6.5	8.6	13	252	118	12	3.8	.85
5	2.9	7.0	8.7	8.0	6.4	9.7	15	377	119	16	3.5	.76
6	3.0	7.1	8.2	8.5	6.5	8.4	18	428	110	12	2.8	.74
7	3.0	8.3	8.1	9.0	6.5	11	22	270	100	11	3.3	.77
8	3.1	7.8	7.9	9.3	6.5	8.5	22	219	91	10	4.3	.71
9	3.2	6.2	8.7	8.9	6.4	8.1	37	220	83	8.7	3.3	.68
10	3.4	6.0	6.8	8.5	6.4	8.0	46	263	77	9.5	2.5	.79
11	3.3	6.2	7.0	7.8	6.3	7.8	48	348	71	13	2.0	1.5
12	3.1	7.5	6.7	7.4	6.0	8.1	54	482	67	11	1.8	6.4
13	4.3	6.4	9.0	6.9	6.0	8.7	84	595	61	8.6	1.7	7.6
14	8.0	6.9	6.7	6.8	5.9	8.3	164	613	57	7.0	1.6	6.4
15	5.9	7.1	7.0	6.8	5.8	8.2	221	539	50	6.2	1.5	4.6
16	4.7	6.2	7.0	7.0	5.8	7.9	264	507	45	5.9	1.6	3.3
17	4.0	9.0	6.0	7.0	5.7	8.2	308	491	40	5.7	2.4	2.6
18	3.7	9.6	6.0	7.2	5.8	8.6	258	666	36	4.9	2.0	2.2
19	3.7	7.1	6.0	7.2	5.8	8.4	343	530	32	4.4	1.8	2.0
20	3.6	7.2	6.5	7.2	5.9	8.5	352	392	29	4.2	1.5	1.9
21	3.4	6.7	7.0	7.3	6.0	9.6	356	311	26	3.8	1.7	2.0
22	3.4	6.9	7.5	7.1	6.2	11	260	267	26	3.5	2.4	2.6
23	3.6	6.6	7.0	6.8	6.2	11	183	250	24	3.4	2.0	2.9
24	4.7	7.0	7.0	6.8	6.2	9.1	145	248	22	3.3	1.5	2.7
25	9.7	8.2	7.5	6.5	6.5	11	131	252	19	3.2	1.2	2.5
26.	7.6	6.3	7.0	6.4	6.7	9.3	111	235	17	3.1	1.1	2.3
27	5.7	6.2	6.0	6.5	7.6	19	109	228	16	3.2	1.1	2.2
28	4.8	5.2	5.0	6.5	16	23	143	216	16	3.2	1.0	2.6
29	4.4	5.8	5.0	6.5	16	31	203	201	26	5.5	.91	2.9
30	6.1	6.7	5.5	6.5	---	10	370	187	19	7.4	.91	2.9
31	10	---	6.0	6.5	---	17	---	159	---	5.1	.79	---
TOTAL	138.7	228.9	222.5	223.9	200.7	337.7	4356	10690	1770	234.8	66.71	72.15
MEAN	4.47	7.63	7.18	7.22	6.92	10.9	145	345	59.0	7.57	2.15	2.40
MAX	10	16	9.8	9.3	16	31	370	666	134	16	4.3	7.6
MIN	2.9	5.2	5.0	6.0	5.7	7.8	13	159	16	3.1	.79	.68
AC-FT	275	454	441	444	398	670	8640	21200	3510	466	132	143

CAL YR 1987 TOTAL 13933.0 MEAN 38.2 MAX 472 MIN 1.6 AC-FT 27640
WTR YR 1988 TOTAL 18542.06 MEAN 50.7 MAX 666 MIN .68 AC-FT 36780

09246920 FORTIFICATION CREEK NEAR FORTIFICATION, CO

LOCATION.--Lat 40°44'38", long 107°32'25", in NW¼NW¼ sec. 18, T.9 N., R.90 W., Moffat County, Hydrologic Unit 14050001, on right bank, 4.5 mi south of Fortification.

DRAINAGE AREA.--40.0 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1984 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,520 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 16 to Apr. 8, and Aug. 30 to Sept. 30. Records fair except for estimated daily discharges, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 465 ft^3/s, March 25, 1985, gage height, 4.64 ft; no flow, July 12 to Sept. 5, 1988.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 205 ft^3/s at 0900 May 13, gage height, 3.22 ft; no flow, July 12 to Sept. 5.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.77	2.9	1.4	1.3	1.3	1.8	4.0	51	16	.72	.00	.00
2	.82	4.4	1.3	1.3	1.3	1.8	5.0	32	12	.56	.00	.00
3	.80	3.4	1.3	1.3	1.3	1.8	8.0	22	14	.41	.00	.00
4	.81	2.5	1.2	1.3	1.4	1.8	11	26	19	.24	.00	.00
5	.79	2.3	1.2	1.3	1.4	1.8	13	30	26	.14	.00	.00
6	.82	2.3	1.2	1.3	1.4	1.8	16	43	25	.09	.00	.15
7	.81	2.5	1.2	1.3	1.4	1.8	28	26	24	.05	.00	.22
8	.85	2.6	1.1	1.3	1.4	1.8	41	23	22	.03	.00	.27
9	.90	2.2	1.1	1.3	1.5	1.8	33	30	18	.02	.00	.30
10	1.0	3.0	1.1	1.3	1.5	1.8	31	37	17	.01	.00	.80
11	.96	3.4	1.0	1.3	1.5	1.8	9.1	38	16	.01	.00	1.8
12	1.0	3.4	.96	1.3	1.6	1.9	18	49	14	.00	.00	1.4
13	1.1	2.5	.93	1.3	1.6	2.0	26	119	12	.00	.00	1.5
14	1.9	2.4	.89	1.3	1.6	2.1	28	156	9.9	.00	.00	1.3
15	1.7	4.1	.90	1.3	1.7	2.2	28	107	6.3	.00	.00	1.0
16	1.3	1.9	.92	1.3	1.7	2.4	32	67	4.5	.00	.00	.84
17	1.3	1.8	.94	1.3	1.7	2.6	38	75	3.7	.00	.00	.76
18	1.3	1.7	.94	1.2	1.7	2.9	26	102	3.5	.00	.00	.68
19	1.3	1.6	.96	1.2	1.7	2.8	34	77	3.1	.00	.00	.60
20	1.9	1.6	1.0	1.2	1.7	2.5	29	50	2.7	.00	.00	.54
21	1.3	1.6	1.1	1.2	1.7	3.0	28	37	2.5	.00	.00	.58
22	1.6	1.6	1.1	1.3	1.7	3.5	27	33	2.3	.00	.00	1.2
23	2.0	1.6	1.1	1.3	1.6	3.8	21	29	2.0	.00	.00	1.3
24	1.7	1.6	1.1	1.3	1.6	3.6	19	33	1.9	.00	.00	.90
25	3.1	1.5	1.1	1.3	1.7	4.0	20	39	1.7	.00	.00	.68
26	2.6	1.5	1.2	1.3	1.8	5.8	16	38	1.4	.00	.00	.60
27	2.1	1.5	1.2	1.3	1.8	6.8	15	39	1.3	.00	.00	.60
28	2.0	1.5	1.3	1.3	1.8	5.0	17	40	1.1	.00	.00	.70
29	2.0	1.5	1.3	1.3	1.8	4.2	24	39	.95	.00	.00	.70
30	2.5	1.4	1.3	1.3	---	3.6	35	36	.79	.00	.00	.70
31	3.4	---	1.3	1.3	---	3.5	---	25	---	.00	.00	---
TOTAL	46.43	67.8	34.64	39.9	45.9	88.0	680.1	1548	284.64	2.28	0.0	20.12
MEAN	1.50	2.26	1.12	1.29	1.58	2.84	22.7	49.9	9.49	.074	.00	.67
MAX	3.4	4.4	1.4	1.3	1.8	6.8	41	156	26	.72	.00	1.8
MIN	.77	1.4	.89	1.2	1.3	1.8	4.0	22	.79	.00	.00	.00
AC-FT	92	134	69	79	91	175	1350	3070	565	4.5	.00	40

CAL YR 1987 TOTAL 4250.29 MEAN 11.6 MAX 113 MIN .01 AC-FT 8430
WTR YR 1988 TOTAL 2857.81 MEAN 7.81 MAX 156 MIN .00 AC-FT 5670

09246920 FORTIFICATION CREEK NEAR FORTIFICATION, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 1985 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (US/CM)	PH (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	HARDNESS TOTAL (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)
OCT 28...	1250	1.8	370	8.4	12.0	9.2	130	35	11	31
APR 21...	1330	27	183	8.3	6.5	8.4	69	19	5.3	12
SEP 13...	1545	1.5	391	8.2	14.0	7.4	98	23	9.8	30

DATE	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY LAB (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)
OCT 28...	1	2.0	164	33	7.8	0.2	15	233	0.32
APR 21...	0.7	1.4	75	24	3.3	0.2	12	122	0.17
SEP 13...	1	1.4	165	41	7.7	0.2	10	222	0.30

DATE	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOSPHOROUS TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 28...	1.13	<0.1	<0.1	0.02	--	<0.2	0.04	0.03	5.7
APR 21...	8.87	<0.1	<0.1	0.07	0.33	0.40	0.18	0.03	11
SEP 13...	0.91	<0.1	<0.1	0.01	0.59	0.60	0.10	0.06	7.8

DATE	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	ANTIMONY, TOTAL (UG/L AS SB)	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)
OCT 28...	480	<1	1	<100	<10	<1	<1	1	2	850
APR 21...	8900	<1	1	100	<10	<1	13	4	12	10000

DATE	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LITHIUM TOTAL RECOVERABLE (UG/L AS LI)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	STRONTIUM, TOTAL RECOVERABLE (UG/L AS SR)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)
OCT 28...	<5	10	120	<0.1	<1	<1	2	<1	350	<10
APR 21...	<5	10	230	<0.1	<1	13	<1	<1	220	40

09246920 FORTIFICATION CREEK NEAR FORTIFICATION, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
OCT				
06...	0900	0.66	538	---
NOV				
11...	1130	2.0	412	4.5
DEC				
14...	1600	0.89	493	0.0
JAN				
19...	1313	1.2	500	0.0
MAR				
18...	1145	2.9	445	0.5
APR				
07...	1206	17	415	6.0
MAY				
27...	1500	36	98	10.0
JUN				
15...	1425	7.1	165	23.5

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT					
28...	1250	1.8	32	0.16	--
APR					
07...	1206	17	721	33	85
21...	1330	27	499	36	67
SEP					
13...	1545	1.5	119	0.49	88

09247600 YAMPA RIVER BELOW CRAIG, CO.

LOCATION.--Lat 40°28'51", long 107°36'49", in SW¼NW¼ sec. 16, T.6 N., R.91 W., Moffat County, Hydrologic Unit 14050001, on left bank 0.5 mi downstream from state highway 13-789 bridge, and 3.3 mi southwest of Craig.

DRAINAGE AREA.--1,750 mi²

PERIOD OF RECORD.--June 1975 to September 1980 (discharge measurements only), October 1984 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,100 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 15-25, 27-28, Dec. 1-13, and Dec. 17 to Mar. 31. Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by diversions for irrigation, transbasin diversion, storage reservoirs, and return flow from irrigated areas.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,300 ft³/s, May 6, 1985, gage height, 9.68 ft; minimum daily, 1.3 ft³/s, Sept. 1, 1988.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 8,890 ft³/s at 2230 May 19, gage height, 8.82 ft; minimum daily, 1.3 ft³/s, Sept. 1.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	116	297	180	175	185	225	452	3680	4420	1430	241	1.3
2	116	301	180	180	190	225	505	3720	3760	1170	240	4.2
3	120	334	170	180	185	220	689	3030	4030	1030	244	9.6
4	122	331	165	185	185	215	1050	2650	4970	957	223	6.2
5	109	308	165	190	190	215	1050	2750	6010	934	218	19
6	97	309	160	195	190	220	1100	3310	6510	863	226	37
7	84	304	160	190	190	220	1260	3060	6460	778	217	42
8	114	309	150	185	190	210	1630	2410	6370	695	224	17
9	127	299	145	185	190	210	1350	2240	6070	612	218	11
10	131	269	140	185	185	210	1070	2170	5650	542	181	23
11	109	280	140	180	190	215	973	2270	5570	521	164	35
12	108	301	140	180	190	205	1290	2770	4940	518	152	71
13	115	299	135	190	195	200	2000	3760	4450	509	144	150
14	127	314	134	185	200	200	2800	4890	3960	468	150	203
15	159	290	111	185	205	205	3730	5710	3800	434	152	187
16	202	290	107	185	210	210	4350	6010	3650	408	147	166
17	214	220	110	190	210	215	5210	6400	3650	398	159	196
18	195	195	115	185	205	220	4540	7290	3410	368	149	176
19	173	180	120	185	200	230	4500	8600	3460	337	146	180
20	169	190	125	180	205	220	4750	7960	3410	324	148	168
21	192	200	130	180	210	210	4440	5730	3310	302	134	169
22	192	200	135	180	205	200	3940	4500	3060	276	137	165
23	201	195	145	180	205	210	3180	3930	2920	265	135	171
24	221	190	150	190	210	215	2540	3980	2560	246	133	176
25	268	190	150	195	210	210	2250	4570	2260	244	109	167
26	335	195	150	190	215	230	2310	4950	2110	217	92	169
27	313	195	155	190	215	250	1980	5160	1860	204	90	179
28	286	190	160	190	220	290	1880	5450	1700	220	79	192
29	264	184	160	190	220	280	1990	5890	1770	245	65	193
30	257	186	170	190	---	320	2540	6210	1780	273	53	204
31	280	---	170	190	---	390	---	5640	---	256	11	---
TOTAL	5516	7545	4527	5760	5800	7095	71354	140690	117900	16034	4781	3487.3
MEAN	178	251	146	186	200	229	2378	4538	3930	517	154	116
MAX	335	334	180	195	220	390	5210	8600	6510	1430	244	204
MIN	84	180	107	175	185	200	452	2170	1700	204	11	1.3
AC-FT	10940	14970	8980	11420	11500	14070	141500	279100	233900	31800	9480	6920

CAL YR 1987 TOTAL 287985 MEAN 789 MAX 4410 MIN 84 AC-FT 571200
WTR YR 1988 TOTAL 390489.3 MEAN 1067 MAX 8600 MIN 1.3 AC-FT 774500

09249750 WILLIAMS FORK RIVER AT MOUTH NEAR HAMILTON, CO.

LOCATION.--Lat 40°26'14", Long 107°38'50", in SE¼NW¼ sec.31, T.6 N., R.91 W., Moffat County, Hydrologic Unit 14050001, on left bank at coal mine service road crossing, 2,300 ft upstream from confluence with Yampa River, and 6.1 mi north-northeast of Hamilton, Co.

DRAINAGE AREA.--419 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1984 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,170 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge 4,750 ft³/s, May 16, 1984, gage height, 9.96 ft; minimum daily, 15 ft³/s, Aug. 31, 1988.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
May 18	1030	*1,930	*6.90	No other peak greater than base discharge.			

Minimum daily, 15 ft³/s, Aug. 31.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46	65	55	55	61	67	95	644	661	223	64	17
2	45	70	61	58	60	70	95	586	601	193	64	20
3	45	83	66	58	60	72	116	480	738	171	62	21
4	45	75	65	58	60	74	153	465	880	167	71	21
5	44	67	70	57	58	70	164	473	1010	175	77	19
6	44	65	75	55	55	62	160	614	1030	156	65	19
7	44	68	69	54	54	73	174	577	995	144	64	20
8	44	63	64	55	56	66	233	535	933	130	66	19
9	43	67	63	56	57	61	217	523	850	118	63	19
10	44	62	70	58	58	71	177	476	840	107	55	18
11	44	63	75	61	57	73	164	503	833	103	50	22
12	45	68	60	59	57	66	189	685	709	100	47	63
13	45	72	51	58	58	55	259	983	674	95	47	104
14	51	79	41	58	57	54	320	1330	589	88	47	89
15	58	86	41	58	56	56	342	1490	554	83	43	69
16	60	71	42	60	57	64	361	1470	518	77	39	55
17	57	57	45	63	58	62	442	1560	496	74	42	54
18	54	49	49	63	56	57	435	1740	469	70	41	53
19	54	52	55	62	53	55	480	1730	440	66	40	52
20	52	62	57	64	52	67	531	1320	431	61	37	44
21	48	67	57	62	54	82	558	920	403	61	33	44
22	47	73	57	60	55	106	510	748	379	58	39	45
23	50	77	56	60	56	110	418	687	374	55	40	50
24	52	71	56	61	55	106	362	810	342	53	35	49
25	65	59	56	61	53	91	331	952	300	54	33	44
26	74	74	54	61	54	90	312	930	276	53	31	42
27	64	73	55	60	54	123	316	932	298	56	27	42
28	58	54	55	61	57	160	309	1060	277	60	28	42
29	55	58	55	61	60	126	342	1120	320	62	26	44
30	60	58	56	61	---	112	442	1030	276	68	19	45
31	65	---	56	61	---	101	---	819	---	66	15	---
TOTAL	1602	2013	1787	1839	1638	2502	9007	28192	17496	3047	1410	1245
MEAN	51.7	67.1	57.6	59.3	56.5	80.7	300	909	583	98.3	45.5	41.5
MAX	74	86	75	64	61	160	558	1740	1030	223	77	104
MIN	43	49	41	54	52	54	95	465	276	53	15	17
AC-FT	3180	3990	3540	3650	3250	4960	17870	55920	34700	6040	2800	2470

CAL YR 1987 TOTAL 62353 MEAN 171 MAX 1130 MIN 41 AC-FT 123700
WTR YR 1988 TOTAL 71778 MEAN 196 MAX 1740 MIN 15 AC-FT 142400

09249750 WILLIAMS FORK AT MOUTH NEAR HAMILTON, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--June 1975 to September 1980, December 1985 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
OCT									
28...	1520	57	657	8.7	9.0	10.4	300	60	37
APR									
21...	1110	598	366	8.4	7.5	9.6	170	39	17
AUG									
04...	1017	70	567	8.5	20.5	6.1	240	48	29

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
OCT									
28...	26	0.7	2.0	189	160	7.2	0.2	11	417
APR									
21...	11	0.4	1.7	129	67	2.6	0.2	11	227
AUG									
04...	30	0.9	1.9	135	120	5.1	0.2	10	355

DATE	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P)	PHOS-PHOROUS ORTHO, DIS-SOLVED (MG/L AS P)
OCT								
28...	0.57	64.1	<0.01	<0.1	0.01	<0.2	0.01	<0.01
APR								
21...	0.31	367	<0.01	0.11	0.02	0.60	0.02	<0.01
AUG								
04...	0.48	67.5	<0.01	<0.1	0.03	0.70	<0.01	<0.01

DATE	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)
APR									
21...	14000	3	100	<10	1	20	9	26	10

DATE	LITHIUM TOTAL RECOV-ERABLE (UG/L AS LI)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	CYANIDE TOTAL (MG/L AS CN)
APR								
21...	30	570	<0.1	1	27	2	110	<0.01

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
OCT				
08...	1330	45	720	12.0
27...	1230	60	650	9.0
NOV				
19...	1300	52	894	0.5
JAN				
20...	1045	62	405	0.5
MAR				
18...	1515	60	698	4.0
APR				
20...	1101	571	382	9.5
MAY				
23...	0945	701	294	11.0
JUN				
16...	1005	510	235	16.0
JUL				
22...	1345	55	365	24.0
AUG				
18...	1100	41	584	23.5
31...	1439	12	758	24.0
SEP				
08...	1320	19	569	20.5

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT					
28...	1520	57	361	56	--
APR					
21...	1110	598	5100	8230	20

09250507 WILSON CREEK ABOVE TAYLOR CREEK, NEAR AXIAL, CO

LOCATION.--Lat 40°18'53", long 107°47'58", in NW¼SW¼ sec.14, T.4 N., R.93 W., Moffatt County, Hydrologic Unit 14050002, on left bank about 200 ft upstream from Moffat County Road 17, about 50 ft upstream from confluence of Taylor Creek, and 2.4 mi north of Axial.

DRAINAGE AREA.--20.0 mi².

PERIOD OF RECORD.--October 1980 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,315 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 16 to March 29, June 13 to July 15, and Sept. 6-14. Records fair. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--8 years, 6.15 ft³/s; 4,460 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 352 ft³/s, May 14, 1984, gage height, 8.71 ft, on basis of indirect measurement of peak flow; minimum daily, 0.12 ft³/s, July 20, 1988.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 19 ft³/s at 0030 May 19, gage height, 2.04 ft; minimum daily, 0.12 ft³/s, July 20.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	1.5	1.1	.88	1.0	1.0	2.9	14	4.3	.50	1.2	1.1
2	1.1	1.7	1.1	.90	1.1	1.0	2.9	13	3.7	.43	1.1	.95
3	1.1	1.5	1.2	.92	1.1	1.1	2.8	13	3.4	.48	1.0	.97
4	1.1	1.4	1.1	.90	1.1	1.1	2.5	13	3.3	.54	1.2	.75
5	1.1	1.5	1.1	.88	1.2	1.0	2.1	12	3.0	.60	.75	.95
6	1.1	1.7	1.0	.90	1.2	1.0	2.2	14	2.6	.52	.71	.34
7	1.2	1.7	1.0	.90	1.2	1.0	2.3	13	2.7	.56	1.2	.33
8	1.1	1.7	1.0	.90	1.3	1.0	2.3	14	3.5	.61	.70	.36
9	1.1	1.9	.90	.90	1.2	1.0	2.6	13	2.6	.58	.59	.30
10	1.0	2.0	.90	.90	1.2	1.0	10	12	2.7	.78	.55	.33
11	1.1	1.8	.90	.92	1.2	1.0	3.1	12	2.6	1.0	.63	.95
12	1.1	2.3	.80	.92	1.1	.98	2.9	12	1.4	1.2	.56	1.1
13	1.2	1.5	.80	.92	1.1	.93	2.9	13	.64	1.1	.51	.94
14	1.3	1.7	.80	.94	1.1	.95	2.1	13	.54	.60	.44	1.0
15	1.2	1.8	.70	.94	1.1	1.0	2.9	12	.56	.40	.51	1.1
16	1.1	1.9	.75	.96	1.1	1.0	3.5	13	.30	.25	.53	1.0
17	1.1	1.8	.75	.98	1.0	1.0	3.8	11	.28	.19	.55	1.1
18	1.2	1.6	.75	1.0	1.0	1.0	3.3	13	.30	.16	.54	1.0
19	1.1	1.5	.80	.98	1.0	1.1	5.2	15	.29	.13	.60	1.1
20	1.4	1.4	.75	1.0	1.0	1.2	8.1	13	.66	.12	.96	1.1
21	1.6	1.4	.75	1.1	1.0	1.3	9.1	9.2	.13	.25	1.0	1.2
22	1.1	1.3	.80	1.0	1.0	1.5	10	8.5	.32	.26	1.1	1.3
23	1.1	1.3	.90	1.0	.98	1.4	9.0	7.2	.33	.31	1.1	1.2
24	1.2	1.4	.90	1.0	.93	1.2	9.3	6.6	.28	.34	.33	1.2
25	1.5	1.3	.95	1.0	.98	1.2	9.8	6.4	.50	.35	.56	1.3
26	1.3	1.2	.90	.96	1.0	1.3	9.0	6.3	.40	.53	1.1	1.4
27	1.3	1.2	.90	1.0	1.0	1.5	8.7	5.7	.66	.66	1.2	.97
28	1.2	1.2	.95	1.0	1.0	1.3	8.8	5.2	1.1	.68	1.2	1.4
29	1.3	1.1	.95	1.1	1.0	2.2	9.8	5.2	1.0	.84	1.2	1.4
30	1.4	1.1	.90	1.0	---	2.7	12	5.3	.70	.86	.93	1.1
31	1.5	---	.90	1.0	---	3.1	---	5.0	---	1.1	1.2	---
TOTAL	37.3	46.5	28.00	29.72	31.24	39.74	168.0	327.0	44.43	17.11	27.05	32.02
MEAN	1.20	1.55	.90	.96	1.08	1.28	5.60	10.5	1.48	.55	.87	1.07
MAX	1.6	2.3	1.2	1.1	1.3	3.1	12	15	4.3	1.2	1.2	1.4
MIN	1.0	1.1	.70	.88	.98	.98	2.1	5.0	.28	.12	.44	.75
AC-FT	74	92	56	59	62	79	333	649	88	34	54	64

CAL YR 1987 TOTAL 1449.64 MEAN 3.97 MAX 38 MIN .40 AC-FT 2880
WTR YR 1988 TOTAL 828.11 MEAN 2.26 MAX 15 MIN .12 AC-FT 1640

09250510 TAYLOR CREEK AT MOUTH, NEAR AXIAL, CO

LOCATION.--Lat 40°18'48", long 107°47'57", in NW¼SW¼ sec.14, T.4 N., R.93 W., Moffatt County, Hydrologic Unit 14050002, on right bank 475 ft upstream from confluence with Wilson Creek, about 1,000 ft southwest of Gossard ranch house, and 2 mi north of Axial.

DRAINAGE AREA.--7.22 mi².

REVISED RECORDS.--WDR CO-87-2; 1986 (M).

PERIOD OF RECORD.--Streamflow records, July 1975 to current year. Water-quality data available, July 1975 to September 1981.

GAGE.--Water-stage recorder. Elevation of gage is 6,300 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Mar. 28, 1980, gage 25 ft upstream at datum 1.00 ft, higher, Mar. 28, 1980 to Apr. 1, 1985 at same site at datum 1.08 ft, higher, Apr. 1, 1985 to Sept. 17, 1986 at same site at datum 1.00 ft, higher.

REMARKS.--Estimated daily discharges: Nov. 14 to Dec. 10, Dec. 16 to Mar. 21, and Apr. 27 to May 23. Records good except for estimated daily discharges, which are poor. No diversions upstream from station. Low dam to prevent erosion, 75 ft upstream. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--13 years, 0.63 ft³/s; 456 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 41 ft³/s, May 15, 1984, gage height, 3.33 ft, present datum; no flow many days most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3.7 ft³/s at 1200 May 24, gage height, 1.93 ft; no flow many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.09	.04	.00	.00	.00	.28	.05	.35	.14	.26	.00
2	.00	.10	.04	.00	.00	.00	.27	.06	.31	.19	.23	.00
3	.00	.01	.04	.00	.00	.00	.27	.08	.30	.26	.22	.00
4	.00	.00	.03	.00	.00	.00	.25	.13	.30	.29	.37	.09
5	.00	.00	.03	.00	.00	.00	.24	.30	.27	.31	.20	.33
6	.00	.02	.03	.00	.00	.00	.22	.16	.26	.29	.27	.15
7	.00	.00	.02	.00	.00	.00	.20	.13	.24	.26	.54	.02
8	.00	.09	.02	.00	.00	.00	.18	.19	.14	.33	.31	.01
9	.00	.07	.02	.00	.00	.00	.15	.15	.02	.32	.16	.10
10	.00	.04	.01	.00	.00	.00	.13	.13	.02	.33	.14	.05
11	.00	.04	.00	.00	.00	.00	.13	.21	.03	.34	.11	.34
12	.00	.10	.00	.00	.00	.00	.13	.19	.02	.45	.08	.48
13	.00	.07	.00	.00	.00	.00	.12	.14	.03	.33	.06	.32
14	.21	.07	.00	.00	.00	.00	.12	.22	.02	.32	.11	.13
15	.37	.08	.00	.00	.00	.00	.10	.23	.00	.27	.08	.13
16	.08	.08	.05	.00	.00	.00	.10	.16	.01	.32	.19	.12
17	.00	.07	.06	.00	.00	.00	.08	.17	.01	.32	.05	.08
18	.00	.07	.00	.00	.00	.00	.07	.30	.01	.29	.02	.04
19	.00	.06	.00	.00	.00	.06	.05	.48	.03	.17	.02	.05
20	.00	.06	.00	.00	.00	.20	.05	.47	.11	.00	.02	.04
21	.00	.06	.00	.00	.00	.42	.08	.36	.04	.00	.02	.03
22	.00	.07	.00	.00	.00	.50	.10	.38	.05	.00	.01	.03
23	.00	.06	.00	.00	.00	.71	.11	.49	.05	.00	.00	.04
24	.00	.07	.00	.00	.00	.70	.15	.60	.04	.00	.00	.02
25	.05	.06	.00	.00	.00	.65	.28	.45	.10	.11	.00	.01
26	.03	.06	.00	.00	.00	.55	.15	.44	.08	.00	.00	.01
27	.00	.06	.00	.00	.00	.46	.10	.43	.17	.05	.09	.01
28	.00	.05	.00	.00	.00	.35	.09	.40	.32	.19	.03	.00
29	.00	.05	.00	.00	.00	.33	.08	.39	.27	.40	.01	.03
30	.00	.05	.00	.00	---	.34	.07	.44	.17	.30	.00	.16
31	.00	---	.00	.00	---	.33	---	.40	---	.31	.00	---
TOTAL	0.74	1.71	0.39	0.00	0.00	5.60	4.35	8.73	3.77	6.89	3.60	2.82
MEAN	.024	.057	.013	.00	.00	.18	.14	.28	.13	.22	.12	.094
MAX	.37	.10	.06	.00	.00	.71	.28	.60	.35	.45	.54	.48
MIN	.00	.00	.00	.00	.00	.00	.05	.05	.00	.00	.00	.00
AC-FT	1.5	3.4	.8	.0	.0	11	8.6	17	7.5	14	7.1	5.6

CAL YR 1987 TOTAL 205.19 MEAN .56 MAX 3.2 MIN .00 AC-FT 407
WTR YR 1988 TOTAL 38.60 MEAN .11 MAX .71 MIN .00 AC-FT 77

09251000 YAMPA RIVER NEAR MAYBELL, CO

LOCATION.--Lat 40°30'10", long 108°01'45", in NW¼ sec.2, T.6 N., R.95 W., Moffat County, Hydrologic Unit 14050002, on left bank 100 ft downstream from bridge on U.S. Highway 40, 2.0 mi downstream from Lay Creek, and 3.0 mi east of Maybell.

DRAINAGE AREA.--3,410 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1904 to October 1905, June 1910 to November 1912, April 1916 to current year. Monthly discharge only for some periods, published in WSP 1313. No winter records prior to 1917.

GAGE.--Water-stage recorder. Datum of gage is 5,900.23 ft above National Geodetic Vertical Datum of 1929. See WSP 1733 for history of changes prior to Mar. 9, 1937.

REMARKS.--Estimated daily discharges: Nov. 14-Mar. 31, July 25-29. Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by transbasin diversions, numerous storage reservoirs, and diversions upstream from station for irrigation of about 65,000 acres upstream from, and about 800 acres downstream from station.

AVERAGE DISCHARGE.--72 years (water years 1917-88), 1,584 ft³/s; 1,148,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 25,100 ft³/s, May 17, 1984, gage height, 12.42 ft; minimum daily, 2.0 ft³/s, July 17-19, 1934.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 7,000 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
May 19	1400	*10,200	*8.46	June 8	0330	7,4[illegible]	7.[illegible]
May 31	0500	7,320	7.24				

Minimum daily discharge, 37 ft³/s, Sept. 3-7, 10-12.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	140	369	200	185	240	320	708	3830	6370	1980	283	54
2	137	402	190	190	240	330	695	4700	4530	1630	275	39
3	136	403	190	190	240	340	793	3980	4430	1330	262	37
4	140	434	180	190	250	340	1160	3440	5250	1260	264	37
5	141	425	170	200	240	330	1490	3320	6390	1210	269	37
6	143	405	170	210	230	320	1450	3680	7250	1170	262	37
7	128	393	170	215	230	300	1490	4130	7130	1070	264	37
8	117	394	160	215	230	290	1880	3370	7100	915	264	44
9	128	398	160	215	225	300	2040	3070	6820	837	261	45
10	165	379	150	220	220	320	1560	2880	6430	731	259	37
11	176	364	150	230	220	350	1280	2930	6130	664	221	37
12	174	271	150	230	220	330	1390	3310	5500	621	159	37
13	167	390	140	230	225	320	2020	4380	4930	613	167	65
14	173	370	140	240	230	320	2870	5760	4630	573	183	236
15	190	350	140	230	230	320	3640	7000	4240	520	160	318
16	212	340	130	230	235	320	4250	7210	4130	474	182	291
17	264	290	135	230	240	330	4850	7600	3920	447	177	245
18	272	210	140	230	245	320	5140	8350	3390	419	174	237
19	265	215	140	235	240	310	4950	9800	3660	377	172	232
20	250	220	145	230	235	300	5120	9590	3730	332	160	230
21	238	230	150	230	240	300	4850	7430	3620	321	160	214
22	253	230	150	225	245	300	4730	5680	3490	299	153	222
23	257	220	160	225	240	310	4020	4860	3300	285	146	222
24	262	220	160	230	235	320	3300	4660	3110	259	152	220
25	322	220	160	230	240	340	2890	5120	2750	261	142	227
26	365	225	165	240	250	380	2850	5730	2480	260	128	213
27	424	225	170	230	260	420	2630	5820	2360	260	113	203
28	386	230	175	230	280	500	2420	6270	2520	260	96	214
29	353	220	180	230	300	440	2450	6610	2200	251	83	227
30	336	215	180	235	---	400	2760	6930	2240	252	73	238
31	341	---	180	240	---	450	---	6850	---	280	65	---
TOTAL	7055	9357	4980	6890	6955	10580	81241	168330	133990	20273	5729	4545
MEAN	228	312	161	222	240	341	2708	5430	4466	654	185	151
MAX	424	434	200	240	300	500	5140	9800	7250	1980	283	318
MIN	117	210	130	185	220	290	695	2880	2200	251	65	37
AC-FT	13990	18560	9880	13670	13800	20990	161100	333900	265800	40210	11360	9020

CAL YR 1987 TOTAL 374181 MEAN 1025 MAX 5970 MIN 117 AC-FT 742200
WTR YR 1988 TOTAL 459925 MEAN 1257 MAX 9800 MIN 37 AC-FT 912300

09251000 YAMPA RIVER NEAR MAYBELL, CO--Continued
(National Stream-Quality Accounting Network Station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1950 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: November 1950 to August 1973, July 1975 to current year.
WATER TEMPERATURES: November 1950 to August 1973, July 1975 to current year.
SUSPENDED-SEDIMENT DISCHARGE: December 1950 to May 1958, October 1975 to September 1976, October 1977 to September 1978, October 1981 to September 1982.

INSTRUMENTATION:--Water-quality monitor since July 1975.

REMARKS.--Unpublished maximum and minimum specific conductance data for period of daily record available in district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 1,260 microsiemens Nov. 17, 1985; minimum, 89 microsiemens June 27, 1983.
WATER TEMPERATURES: Maximum, 33.0°C Aug. 29, 1976; minimum, freezing point on many days during winter months each year.
SEDIMENT CONCENTRATIONS: Maximum daily, 6,180 mg/l, Aug. 16, 1981; minimum daily, 1 mg/l, several days during December 1975 to February 1976, Jan. 6, 1980.
SEDIMENT LOADS: Maximum daily, 47,100 tons May 9, 1958; minimum daily, 0.04 ton Oct. 2,3, 1982

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 1,190 microsiemens Apr. 2; minimum, 120 microsiemens June 12.
WATER TEMPERATURES: Maximum, not determined; minimum, freezing point on many days during winter months.

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	TUR-BID-ITY (FTU)	OXYGEN, DIS-SOLVED (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
OCT												
21...	1145	241	763	8.8	6.5	2.8	10	K2	41	280	54	36
FEB												
09...	1100	246	870	8.6	0.0	2.0	9.8	K1	K2	340	65	43
MAY												
16...	1100	7470	--	8.1	12.0	150	7.3	200	K8	82	21	7.2
AUG												
03...	1100	260	429	8.2	21.5	4.2	7.3	110	K15	160	35	18

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
OCT												
21...	60	2	3.0	178	17	174	200	23	0.3	2.3	502	482
FEB												
09...	63	2	3.4	230	--	190	260	22	0.3	13	592	591
MAY												
16...	8.3	0.4	5.0	70	--	58	33	3.5	0.3	9.9	128	125
AUG												
03...	32	1	2.5	144	5	126	88	11	0.2	1.2	271	264

DATE	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHOROUS TOTAL (MG/L AS P)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P)	PHOS-PHOROUS ORTHO, DIS-SOLVED (MG/L AS P)
OCT											
21...	0.68	327	<0.01	<0.10	<0.01	<0.01	--	0.4	0.01	<0.01	<0.01
FEB											
09...	0.81	393	<0.01	0.84	0.17	0.14	0.33	0.5	0.07	0.04	0.03
MAY											
16...	0.17	2580	<0.01	<0.10	0.11	0.11	0.69	0.8	0.07	0.06	<0.01
AUG											
03...	0.37	190	<0.01	<0.10	0.06	0.05	0.64	0.7	0.03	0.03	0.01

K BASED ON NON-IDEAL COLONY COUNT.

09251000 YAMPA RIVER NEAR MAYBELL, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	ALUMINUM, DIS-SOLVED (UG/L AS AL)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYLLIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHROMIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)
OCT											
21...	1145	20	<1	46	<0.5	<1	2	<3	4	33	<5
FEB											
09...	1100	<10	<1	<100	<0.5	<1	<1	<3	2	12	<5
MAY											
16...	1100	80	1	28	<0.5	<1	5	<3	18	120	6
AUG											
03...	1100	20	1	51	<0.5	<1	1	<3	5	33	<5

DATE	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGANESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYBDENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELENIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRONTIUM, DIS-SOLVED (UG/L AS SR)	VANADIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)
OCT										
21...	40	10	0.2	<10	2	1	<1.0	500	<6	5
FEB										
09...	42	27	<0.1	<10	<1	2	<1.0	550	<6	<3
MAY										
16...	7	11	<0.1	<10	2	<1	<1.0	150	<6	6
AUG										
03...	22	6	<0.1	10	3	<1	<1.0	290	<6	<3

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)
OCT				
21...	1145	241	15	9.8
NOV				
18...	1245	198	23	12
MAR				
06...	1120	320	43	37
13...	1530	320	36	31
19...	1455	1000	37	100
28...	0840	833	215	484
APR				
01...	1505	651	81	142
06...	1540	1370	372	1380
13...	1735	2130	247	1420
20...	1305	4980	681	9150
27...	1545	2500	162	1100
MAY				
08...	0855	3370	221	2010
15...	1807	7140	1190	23000
16...	1100	7470	1070	21600
22...	1725	5370	458	6640
29...	0710	6490	397	6960
JUN				
05...	0630	6270	454	7680
12...	0945	5910	154	2460
19...	0640	3720	88	884
25...	0715	2900	61	478
JUL				
03...	0640	1390	70	263
10...	0825	740	19	38
17...	0640	455	8	9.8
22...	1110	314	13	11
24...	0725	270	5	3.6
AUG				
03...	1100	260	9	6.3
07...	1425	268	35	25
10...	1225	158	4	1.7
23...	1435	143	4	1.5
24...	1745	154	4	1.7
SEP				
03...	1555	37	5	0.50
11...	1305	37	4	0.40
17...	1440	238	9	5.8
27...	1805	210	4	2.3

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
July					
31...	1050	275	8	5.9	64

09251000 YAMPA RIVER NEAR MAYBELL, CO--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	703	670	836	820	817	832	1070	372	183	254	479	733
2	739	678	825	808	808	840	1160	310	195	260	470	765
3	743	674	818	811	809	854	1090	280	203	285	460	804
4	750	690	816	816	816	876	1040	320	186	294	468	851
5	752	685	778	825	822	918	911	337	160	301	471	885
6	753	661	768	828	837	959	930	327	147	319	487	960
7	753	651	760	829	837	960	1020	297	144	322	499	965
8	763	644	761	827	835	994	940	300	140	348	493	994
9	773	648	816	815	841	996	806	320	138	---	512	975
10	782	659	805	807	840	1030	724	340	136	---	529	934
11	801	676	793	814	829	1070	727	346	139	378	519	902
12	815	695	826	822	818	1080	746	325	132	386	526	978
13	811	710	889	829	821	1080	720	291	146	394	535	1090
14	813	703	948	830	824	1020	608	253	151	395	552	1030
15	840	720	971	826	830	1010	343	224	157	404	568	959
16	882	690	1020	811	844	1010	296	201	157	409	576	725
17	877	695	1020	799	845	991	304	195	160	417	580	654
18	844	685	1050	801	841	1000	337	192	156	425	576	637
19	799	730	1060	802	836	954	347	208	160	437	580	621
20	762	730	1020	796	825	886	373	222	150	450	585	615
21	752	762	913	801	821	782	369	234	156	460	580	606
22	744	779	840	805	826	798	358	237	152	465	583	596
23	732	750	816	806	824	901	362	237	158	465	596	595
24	741	740	817	806	817	974	379	238	173	480	604	596
25	702	730	844	811	817	973	398	222	180	---	622	613
26	737	743	872	813	822	1020	417	198	---	---	629	620
27	718	750	887	810	832	1010	429	188	---	---	642	623
28	702	773	880	811	839	1050	464	184	---	---	647	616
29	696	801	887	812	835	900	454	174	---	---	650	606
30	677	814	873	814	---	913	425	165	248	501	672	598
31	675	---	836	827	---	975	---	162	---	498	700	---

09251000 YAMPA RIVER NEAR MAYBELL, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	16.2	10.2	11.1	9.7	.4	.0	.1	.0	.1	.0	.1	.0
2	16.5	10.3	10.7	9.3	.7	.0	.1	.0	.1	.0	.1	.0
3	16.2	10.1	10.2	8.1	1.1	.0	.1	.0	.1	.0	.1	.0
4	15.3	9.8	9.6	7.4	1.0	.0	.1	.0	.1	.0	.1	.0
5	15.8	10.1	9.3	6.9	.6	.0	.1	.0	.1	.0	.1	.0
6	15.7	9.8	9.8	8.0	1.0	.0	.1	.0	.1	.0	.1	.0
7	15.5	9.6	8.1	6.8	.9	.0	.1	.0	.1	.0	.1	.0
8	15.7	9.6	7.9	5.7	.5	.0	.1	.0	.1	.0	.1	.0
9	14.9	9.1	7.1	4.7	.2	.0	.1	.0	.1	.0	.1	.0
10	14.0	9.4	5.6	4.4	.6	.0	.1	.0	.1	.0	.1	.0
11	13.7	8.7	---	---	1.0	.0	.1	.0	.1	.0	.1	.0
12	12.3	8.2	---	---	.4	.0	.1	.0	.1	.0	.1	.0
13	11.8	10.1	---	---	.3	.0	.1	.0	.1	.0	.1	.0
14	10.4	9.3	---	---	.5	.0	.1	.0	.1	.0	.1	.0
15	12.5	8.9	---	---	.1	.0	.1	.0	.1	.0	.1	.0
16	12.1	8.3	---	---	.2	.0	.1	.0	.1	.0	.1	.0
17	11.2	7.4	---	---	.2	.0	.1	.0	.1	.0	.1	.0
18	9.9	7.5	1.5	.0	.2	.0	.1	.0	.1	.0	.1	.0
19	10.0	6.3	1.1	.0	.1	.0	.1	.0	.1	.0	.1	.0
20	9.4	5.6	1.1	.0	.2	.0	.1	.0	.1	.0	.2	.0
21	9.0	5.0	.6	.0	.1	.0	.1	.0	.1	.0	.2	.0
22	9.2	5.2	.7	.0	.1	.0	.1	.0	.1	.0	.2	.0
23	8.5	5.6	.9	.0	.1	.0	.1	.0	.1	.0	.6	.0
24	10.1	7.4	1.2	.0	.1	.0	.1	.0	.1	.0	1.0	.0
25	11.0	8.3	.3	.0	.1	.0	.1	.0	.1	.0	1.2	.0
26	10.7	8.0	.6	.0	.1	.0	.1	.0	.1	.0	3.0	.0
27	10.1	7.6	.6	.0	.1	.0	.1	.0	.1	.0	2.1	.1
28	9.2	6.7	.4	.0	.1	.0	.1	.0	.1	.0	2.8	.4
29	10.6	7.5	.4	.0	.1	.0	.1	.0	.1	.0	2.0	.0
30	9.8	8.9	.7	.0	.1	.0	.1	.0	---	---	1.6	.9
31	10.9	8.4	---	---	.1	.0	.1	.0	---	---	4.3	.6
MONTH	16.5	5.0	---	---	1.1	.0	.1	.0	.1	.0	4.3	.0
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	6.3	1.5	12.3	9.1	12.0	9.3	22.2	18.5	23.6	19.7	23.9	16.0
2	8.2	3.7	8.9	6.7	13.9	11.1	22.4	18.2	23.4	19.2	23.1	15.6
3	8.9	5.5	8.9	5.5	15.5	12.6	22.0	15.0	24.1	19.5	21.9	14.4
4	8.2	6.3	10.0	7.2	15.8	14.3	21.1	19.2	24.7	19.8	22.9	13.3
5	7.4	4.3	11.7	8.5	15.6	14.1	21.9	18.5	24.3	19.4	22.9	13.4
6	9.0	4.7	10.6	8.1	15.2	13.6	21.4	18.7	22.9	20.2	21.0	12.4
7	10.8	6.5	8.4	6.7	14.4	12.1	22.5	18.4	22.1	19.0	21.1	12.9
8	9.4	7.1	8.1	6.9	14.5	12.5	---	---	23.3	18.9	21.6	12.5
9	6.9	5.0	9.6	6.9	14.7	12.7	---	---	23.1	17.8	21.5	12.9
10	7.0	3.2	11.7	9.0	14.6	13.3	---	---	23.1	18.2	19.5	15.2
11	9.2	4.4	13.4	9.6	14.7	13.6	22.7	19.2	23.6	18.3	15.5	12.2
12	11.2	6.7	14.6	11.2	14.4	13.0	22.3	19.5	22.1	18.8	12.1	11.2
13	11.7	8.5	14.9	11.9	14.4	13.1	23.8	18.5	22.4	17.0	15.1	10.3
14	10.2	8.6	13.6	11.8	15.0	12.9	24.7	20.9	23.4	17.0	12.7	11.3
15	9.0	7.7	12.9	11.0	16.0	13.4	23.8	20.2	22.8	17.7	15.1	11.0
16	8.8	7.3	12.7	11.0	16.5	14.6	24.4	20.0	24.6	18.7	16.8	12.1
17	8.3	7.4	12.4	11.4	16.4	14.6	23.3	19.2	24.2	16.7	17.2	13.1
18	7.7	6.6	11.5	9.8	17.4	15.2	24.2	18.9	24.5	19.0	15.2	11.2
19	9.4	7.2	9.8	8.9	18.1	15.1	23.3	19.0	24.9	18.5	13.9	8.8
20	9.3	8.1	8.7	7.7	19.2	16.6	23.2	18.1	22.9	18.8	15.2	10.4
21	8.7	7.6	10.0	8.0	19.5	16.9	23.7	18.8	23.9	18.5	14.6	11.8
22	7.6	6.3	11.0	8.9	20.8	17.4	23.9	19.0	25.3	19.7	14.9	11.7
23	7.6	5.7	12.8	10.4	20.9	17.9	23.5	20.0	24.7	18.1	16.6	12.0
24	8.4	6.0	14.0	11.6	21.6	18.2	24.5	18.9	24.4	18.2	16.9	12.4
25	8.1	6.3	14.4	12.7	21.7	19.1	---	---	24.6	18.3	16.5	12.8
26	8.3	4.9	13.4	12.1	21.7	19.0	---	---	23.4	18.1	14.9	12.0
27	9.4	6.3	13.0	11.7	22.4	19.2	---	---	23.9	17.4	16.4	12.2
28	10.7	7.9	13.6	11.8	20.8	14.6	---	---	24.2	16.4	13.0	9.7
29	12.0	9.0	12.9	11.7	19.8	17.4	---	---	24.3	16.2	12.9	8.1
30	13.2	10.3	11.9	10.5	21.1	17.5	25.0	20.2	24.5	16.2	14.4	9.5
31	---	---	10.3	8.8	---	---	26.0	21.5	24.6	16.5	---	---
MONTH	13.2	1.5	14.9	5.5	22.4	9.3	---	---	25.3	16.2	23.9	8.1

09253000 LITTLE SNAKE RIVER NEAR SLATER, CO

LOCATION.--Lat 40°59'58", long 107°08'34", in SW¼NW¼ sec.15, T.12 N., R.87 W., Routt County, Hydrologic Unit 14050003, on left bank just downstream from highway bridge at Focus Ranch, 0.2 mi downstream from Spring Creek, and 12 mi east of Slater.

DRAINAGE AREA.--285 mi^2.

PERIOD OF RECORD.--October 1942 to September 1947, October 1950 to current year.

REVISED RECORDS.--WSP 1733: 1960.

GAGE.--Water-stage recorder. Datum of gage is 6,831.00 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Dec. 17 to March 31. Records good except for estimated daily discharges, which are poor. Diversions for irrigation of about 2,000 acres upstream from station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--43 years, 236 ft^3/s; 171,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,780 ft^3/s, May 23, 1984, gage height, 8.78 ft; maximum gage height, 9.95 ft, Apr. 25, 1974; minimum daily discharge, 4.2 ft^3/s, Sept. 9, 1988.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,600 ft^3/s, and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 18	0400	*2,430	*7.19	May 28	2200	1,810	6.63

Minimum daily discharge, 4.2 ft^3/s, Sept. 9.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	40	24	24	25	25	72	759	983	154	24	12
2	18	67	25	24	25	27	77	538	946	140	24	14
3	16	77	24	25	25	28	89	420	1050	131	24	13
4	17	43	23	25	25	30	83	422	1230	124	27	8.8
5	17	39	21	25	25	30	84	544	1410	125	25	6.1
6	17	44	19	25	25	29	89	686	1400	103	22	6.8
7	18	47	16	25	24	27	122	473	1340	96	26	6.7
8	19	37	14	25	23	33	138	435	1240	98	32	5.0
9	19	27	12	25	23	24	114	447	1110	73	24	4.2
10	20	28	13	25	23	27	104	491	1030	77	21	5.8
11	13	36	10	25	24	27	112	535	978	81	22	21
12	15	32	6.2	25	24	29	155	756	870	78	23	49
13	22	36	13	25	24	28	214	1070	776	74	22	45
14	15	27	19	25	24	26	267	1330	689	64	20	52
15	12	14	9.5	25	24	23	336	1430	649	54	17	39
16	21	11	13	25	24	24	449	1540	652	50	22	30
17	29	28	19	25	24	24	481	1650	616	48	28	24
18	28	36	21	26	24	24	451	2130	567	44	34	21
19	27	23	23	27	24	24	519	1950	540	41	28	19
20	20	23	25	27	24	25	520	1360	504	39	22	19
21	19	33	26	27	24	28	540	1100	462	36	29	18
22	23	24	26	26	24	34	451	1040	424	33	46	26
23	26	22	25	26	24	40	337	1030	376	31	31	33
24	38	20	25	25	24	41	290	1200	301	28	23	25
25	62	20	25	26	24	42	280	1250	260	27	20	21
26	49	19	25	26	23	41	240	1280	230	27	18	20
27	34	19	24	26	23	40	241	1400	224	30	16	20
28	30	20	24	26	23	45	294	1530	217	30	15	24
29	33	23	25	26	24	50	399	1590	249	33	15	29
30	47	25	25	25	---	25	622	1490	181	35	14	26
31	47	---	25	25	---	65	---	1160	---	28	12	---
TOTAL	792	940	624.7	787	696	987	8175	33086	21504	2032	726	643.4
MEAN	25.5	31.3	20.2	25.4	24.0	31.8	272	1067	717	65.5	23.4	21.4
MAX	62	77	26	27	25	65	622	2130	1410	154	46	52
MIN	12	11	6.2	24	23	23	72	420	181	27	12	4.2
AC-FT	1570	1860	1240	1560	1380	1960	16220	65630	42650	4030	1440	1280

CAL YR 1987 TOTAL 42987.7 MEAN 118 MAX 855 MIN 6.2 AC-FT 85270
WTR YR 1988 TOTAL 70993.1 MEAN 194 MAX 2130 MIN 4.2 AC-FT 140800

09255000 SLATER FORK NEAR SLATER, CO

LOCATION.--Lat 40°58'57", long 107°22'56", in SW¼NE¼ sec.21, T.12 N., R.89 W., Moffat County, Hydrologic Unit 14050003, on right bank 15 ft downstream from highway bridge, 1.0 mi upstream from mouth, and 1.5 mi south of Slater.

DRAINAGE AREA.--161 mi².

PERIOD OF RECORD.--May to October, December 1910, March to October 1911, and April to May 1912 (published as Slater Creek), July 1931 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 618: 1910-11. WSP 764: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 6,600 ft, from river-profile map. May 28, 1910, to May 25, 1912, nonrecording gage at site 1.5 mi upstream at different datum. July 9, 1931, to May 6, 1932, nonrecording gage at site 0.2 mi downstream at different datum.

REMARKS.-Estimated daily discharges: Nov. 17 to Mar. 4, and Mar. 8 to Mar. 30. Records good except for estimated daily discharges, which are poor. Diversions for irrigation of about 500 acres upstream from station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--57 years (water years 1932-88), 78.5 ft³/s; 56,870 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,250 ft³/s May 16, 1984, gage height, 11.78 ft (from floodmark), from rating curve extended above 1,000 ft³/s.; no flow Aug. 2-10, 1934, Aug. 18, 25-27, 1936, Aug. 29 to Sept. 3, 1954, Aug. 3, 4, 15, 16, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 430 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
May 1	0230	439	5.80	May 28	0030	554	6.38
May 18	0900	*1,000	*8.20				

Minimum daily discharge, 2.2 ft³/s, Sept. 9-10.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	24	14	18	17	16	43	340	200	27	4.5	2.9
2	16	33	15	18	17	16	51	214	196	23	3.9	3.3
3	17	28	15	17	17	16	40	162	223	21	3.9	3.4
4	15	23	14	17	17	15	47	170	280	20	4.9	3.2
5	12	18	14	16	17	15	43	226	328	19	5.5	3.2
6	12	18	14	16	17	17	43	320	320	16	4.4	2.5
7	14	18	14	16	17	17	59	192	274	16	4.9	2.4
8	16	17	13	16	17	17	77	167	241	13	5.9	2.3
9	18	16	13	16	17	17	59	177	205	12	6.6	2.2
10	20	17	13	16	18	17	47	210	193	11	5.7	2.2
11	20	17	13	16	18	17	49	239	180	11	4.4	4.4
12	21	16	13	16	19	17	65	377	165	12	3.4	13
13	23	21	13	16	19	17	88	509	139	9.9	2.6	20
14	30	19	13	16	19	17	105	594	120	7.7	2.9	24
15	25	19	13	16	20	17	133	557	101	6.3	2.3	20
16	21	14	13	16	20	17	170	555	88	5.7	3.7	15
17	21	13	14	17	20	17	198	580	90	5.3	4.0	12
18	21	13	14	17	20	17	162	841	85	5.0	2.7	10
19	22	13	14	17	20	17	233	741	82	5.0	3.5	9.0
20	21	13	14	18	19	18	226	450	79	4.6	3.0	9.4
21	20	14	14	18	19	19	265	317	79	3.9	3.2	9.2
22	23	14	15	17	18	23	207	281	77	4.1	3.8	10
23	23	14	16	17	18	26	145	304	68	3.4	4.3	13
24	25	13	17	17	18	27	122	357	54	3.7	3.8	13
25	29	13	17	17	18	28	116	413	43	3.9	3.3	12
26	26	13	16	18	17	26	92	414	40	3.9	2.6	11
27	23	13	16	17	17	26	98	457	36	3.6	2.6	11
28	20	13	17	17	17	27	105	446	36	3.8	2.9	12
29	17	13	17	17	16	30	147	412	38	6.0	2.9	14
30	17	13	17	17	---	33	236	360	33	8.9	2.6	14
31	26	---	18	17	---	37	---	243	---	5.9	2.6	---
TOTAL	630	503	453	520	523	636	3471	11625	4093	301.6	117.3	283.6
MEAN	20.3	16.8	14.6	16.8	18.0	20.5	116	375	136	9.73	3.78	9.45
MAX	30	33	18	18	20	37	265	841	328	27	6.6	24
MIN	12	13	13	16	16	15	40	162	33	3.4	2.3	2.2
AC-FT	1250	998	899	1030	1040	1260	6880	23060	8120	598	233	563

CAL YR 1987 TOTAL 21828.8 MEAN 59.8 MAX 464 MIN 4.1 AC-FT 43300
WTR YR 1988 TOTAL 23156.5 MEAN 63.3 MAX 841 MIN 2.2 AC-FT 45930

09257000 LITTLE SNAKE RIVER NEAR DIXON, WY

LOCATION.--Lat 41°01'42", long 107°32'55", in SE¼ NW¼ sec.8, T.12 N., R.90 W., Carbon County, Hydrologic Unit 14050003, on left bank 200 ft upstream from highway bridge, 1,000 ft upstream from Willow Creek, and 0.8 mi west of Dixon.

DRAINAGE AREA.--988 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1910 to September 1923, March 1938 to current year (no winter records since 1971). Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 1243: 1920(M). WDR WY-85-1: 1984(M).

GAGE.--Water-stage recorder. Datum of gage is 6,331.22 ft above National Geodetic Vertical Datum of 1929. May 27, 1910, to Sept. 30, 1923, nonrecording gage on highway bridge 200 ft downstream at datum 2.98 ft higher; Mar. 15, 1938, to Sept. 30, 1957, water-stage recorder at site 225 ft downstream at datum 2.98 ft higher; Oct. 1, 1957, to June 6, 1968, at site 850 ft downstream at present datum; and June 7 to Sept. 30, 1968, at site 225 ft downstream at present datum.

REMARKS.--Estimated daily discharges: May 21-24, July 5-12, and Aug. 17 to Sept. 26. Records fair except those for flow of less than 100 ft^3/s, which are poor. Diversions for irrigation of about 9,500 acres upstream fromstation. One diversion upstream from station for irrigation of about 3,000 acres downstream. Transbasin iversions upstream from station. National Weather Service satellite telemeter at station.

AVERAGE DISCHARGE.--46 years (water years 1911-23, 1939-71), 514 ft^3/s, 372,400 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,000 ft^3/s, May 16, 1984, gage height, 13.56 ft, from floodmark, from rating curve extended above 10,000 ft^3/s, some increase in peak due to dam failure; no flow, Sept. 19, 20, 22, 1977, Aug. 7, 17, 18, 27-29, 1981.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,200 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 19	1100	*4,850	*9.26	May 29	0500	3,760	8.08

Minimum daily discharge during period of record, 0.14 ft^3/s, Oct. 2.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.18	---	---	---	---	---	204	1950	2240	176	1.1	1.8
2	.14	---	---	---	---	---	233	1290	2030	122	.73	2.1
3	.19	---	---	---	---	---	340	1010	2130	91	.61	1.6
4	.18	---	---	---	---	---	560	949	2380	77	.73	1.4
5	.36	---	---	---	---	---	461	1110	2730	68	.73	.90
6	.76	---	---	---	---	---	429	1610	2740	48	.70	2.3
7	.59	---	---	---	---	---	697	1030	2630	36	.46	2.7
8	.59	---	---	---	---	---	1040	926	2430	27	.34	2.4
9	10	---	---	---	---	---	596	1020	2170	19	1.3	1.6
10	26	---	---	---	---	---	447	1220	1930	17	1.6	1.0
11	27	---	---	---	---	---	429	1250	1840	18	1.1	4.0
12	17	---	---	---	---	---	546	1570	1670	13	1.0	13
13	17	---	---	---	---	---	734	2140	1450	9.7	2.7	12
14	33	---	---	---	---	---	858	2700	1250	7.3	2.2	13
15	59	---	---	---	---	---	955	2870	1110	6.4	2.4	12
16	50	---	---	---	---	---	1200	2990	1010	5.7	3.1	8.1
17	41	---	---	---	---	---	1450	3240	925	4.5	3.3	5.6
18	38	---	---	---	---	---	1200	4260	847	5.3	3.1	4.7
19	38	---	---	---	---	---	1520	4470	810	4.5	2.7	5.1
20	39	---	---	---	---	---	1400	3560	768	4.1	2.4	4.7
21	35	---	---	---	---	---	1480	2730	716	4.3	2.7	4.6
22	34	---	---	---	---	---	1250	2400	640	4.1	4.9	5.2
23	37	---	---	---	---	---	913	2420	607	3.9	3.2	6.6
24	44	---	---	---	---	---	797	2570	476	3.5	2.7	7.8
25	58	---	---	---	---	---	770	2680	369	3.4	2.4	7.1
26	76	---	---	---	---	---	606	2790	307	3.0	2.3	6.5
27	64	---	---	---	---	---	616	3070	282	2.9	2.1	6.3
28	57	---	---	---	---	---	721	3300	243	2.6	2.0	6.4
29	51	---	---	---	---	---	894	3430	290	2.4	1.8	7.4
30	52	---	---	---	---	---	1420	3340	221	2.9	1.8	8.5
31	69	---	---	---	---	236	---	2650	---	2.9	1.8	---
TOTAL	974.99	---	---	---	---	---	24766	72545	39241	795.4	60.00	166.40
MEAN	31.5	---	---	---	---	---	826	2340	1308	25.7	1.94	5.55
MAX	76	---	---	---	---	---	1520	4470	2740	176	4.9	13
MIN	.14	---	---	---	---	---	204	926	221	2.4	.34	.90
AC-FT	1930	---	---	---	---	---	49120	143900	77830	1580	119	330

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1975 to current year.

INSTRUMENTATION.--All bedload samples were collected using a Helley-Smith type sampler of sheet-metal construction, 3.22 flare, 3 inch square nozzle, and equipped with 0.25 mm mesh collection bag.

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE WATER (DEG C)	DICAMBA (MED-IBEN) (BAN-VEL D) TOTAL (UG/L)	PICLO-RAM (TOR-DON) (AMDON) TOTAL (UG/L)	2,4-D, TOTAL (UG/L)	2, 4-DP TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	SILVEX, TOTAL (UG/L)
AUG									
03...	0840	0.64	18.5	<0.01	0.01	<0.01	<0.01	<0.01	<0.01
SEP									
27...	1825	6.2	15.0	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

DATE	TIME	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. FALL DIAM. % FINER THAN .250 MM	SED. SUSP. FALL DIAM. % FINER THAN .500 MM
MAY								
14...	1030	23	28	35	59	76	94	100
17...	1630	25	31	39	62	83	99	100
18...	1710	24	33	37	61	84	100	100

DATE	TIME	TEMPER-ATURE WATER (DEG C)	STREAM WIDTH (FT)	NUMBER OF SAM-PLING POINTS (COUNT)	SAM-PLING METHOD, CODES	GAGE HEIGHT (FEET)	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SEDI-MENT DIS-CHARGE, BEDLOAD (TONS/DAY)	SED. BEDLOAD SIEVE DIAM. % FINER THAN .062 MM
MAY											
11...	2005	--	[illegible]	[illegible]	10.0	5.84	1130	189	577	55	0.2
11...	2055	--	[illegible]	20	10.0	5.84	1130	189	577	43	0.2
12...	0915	--	[illegible]	22	10.0	6.81	1800	371	1800	54	0.2
12...	1010	--	106	19	10.0	6.81	1800	371	1800	69	0.3
14...	0915	--	122	24	10.0	8.12	3200	873	7540	67	0.6
14...	1030	--	122	24	10.0	8.03	3110	873	7330	121	0.4
17...	1210	--	125	26	10.0	8.08	3490	386	3640	71	0.3
17...	1315	--	125	26	10.0	7.97	3380	386	3520	277	0.1
17...	1630	--	123	26	10.0	7.76	3170	357	3060	246	0.2
17...	1730	--	120	26	10.0	7.68	3100	334	2800	106	0.2
18...	1610	--	130	28	10.0	9.11	4900	791	10500	73	0.5
18...	1710	--	130	28	10.0	9.04	4820	791	10300	44	0.7
JUN											
17...	1335	15.5	111	22	10.0	--	1060	--	--	48	0.1
17...	1420	15.5	111	22	10.0	--	1060	87	249	60	0.1

DATE	SED. BEDLOAD SIEVE DIAM. % FINER THAN .125 MM	SED. BEDLOAD SIEVE DIAM. % FINER THAN .250 MM	SED. BEDLOAD SIEVE DIAM. % FINER THAN .500 MM	SED. BEDLOAD SIEVE DIAM. % FINER THAN 1.00 MM	SED. BEDLOAD SIEVE DIAM. % FINER THAN 2.00 MM	SED. BEDLOAD SIEVE DIAM. % FINER THAN 4.00 MM	SED. BEDLOAD SIEVE DIAM. % FINER THAN 8.00 MM	SED. BEDLOAD SIEVE DIAM. % FINER THAN 16.0 MM	SED. BEDLOAD SIEVE DIAM. % FINER THAN 32.0 MM	SED. BEDLOAD SIEVE DIAM. % FINER THAN 64.0 MM
MAY										
11...	0.6	7	72	94	98	100	--	--	--	--
11...	0.5	6	56	97	99	100	--	--	--	--
12...	0.8	6	28	70	93	99	100	--	--	--
12...	1	6	46	88	97	99	100	--	--	--
14...	2	12	80	98	99	100	--	--	--	--
14...	1	6	45	76	88	94	98	100	--	--
17...	1	4	72	78	92	95	98	100	--	--
17...	0.5	3	29	86	94	97	98	99	100	--
17...	0.6	2	25	76	94	98	99	100	--	--
17...	0.7	5	37	74	94	98	100	--	--	--
18...	2	8	52	71	76	79	83	89	96	100
18...	2	10	65	90	96	98	99	100	--	--
JUN										
17...	0.2	2	48	95	100	--	--	--	--	--
17...	0.2	1	33	91	99	100	--	--	--	--

09258000 WILLOW CREEK NEAR DIXON, WY

LOCATION.--Lat 40°54'56", long 107°31'16", on line between secs. 8 and 17, T.11 N., R.90 W., Moffat County, Co., Hydrologic Unit 14050003, on right bank 6.2 mi south of Colorado-Wyoming State line, 8.0 mi upstream from mouth, and 8.3 mi south of Dixon.

DRAINAGE AREA.--24 mi², approximately.

PERIOD OF RECORD.--October 1953 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,700 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 29 to Apr. 2, and Sept. 14-15. Records good except for estimated daily discharges, which are poor. One small ditch diverts water upstream from station for irrigation. Regulation by Elk Lake, capacity, 400 acre-ft.

AVERAGE DISCHARGE.--35 years, 10.7 ft³/s; 7,750 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 476 ft³/s, May 10, 1984, gage height, 6.02 ft, from rating curve extended above 160 ft³/s; Maximum gage height, 7.08 ft, Apr.18, 1984 (backwater from ice); no flow Sept. 17-19, 1955, many days July through September 1977, and Aug. 8-16, 1982.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 70 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
May 18	0445	94	3.86	June 5	2130	*105	*3.95

Minimum daily discharge, 0.59 ft³/s, July 26.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.2	1.9	1.3	2.4	3.0	3.2	5.0	22	14	1.7	4.7	1.1
2	2.3	1.8	1.3	2.4	3.0	3.3	9.0	14	15	5.0	5.0	1.0
3	2.3	1.7	1.4	2.5	3.1	3.4	13	13	29	4.9	4.8	.99
4	2.2	1.6	1.4	2.6	3.2	3.5	8.3	12	41	5.3	5.5	.97
5	2.1	1.5	1.4	2.7	3.1	3.6	6.6	13	68	5.1	5.0	1.0
6	2.2	1.4	1.4	2.8	3.0	3.5	11	15	79	4.9	4.1	.63
7	2.2	1.3	1.4	2.8	3.0	3.4	31	8.4	72	6.5	5.1	.62
8	2.2	1.3	1.5	2.9	3.0	3.3	26	12	62	4.4	4.8	.75
9	2.2	1.2	1.6	3.0	2.9	3.2	10	31	53	4.2	4.0	.85
10	2.3	1.2	1.6	3.0	2.8	3.2	7.4	21	53	4.3	3.5	1.9
11	2.4	1.2	1.6	3.0	2.9	3.1	11	13	51	4.2	3.2	5.0
12	2.3	1.2	1.6	3.0	2.9	3.1	21	15	42	8.7	3.0	3.8
13	3.0	1.3	1.6	3.0	2.9	3.0	27	19	34	6.9	3.0	4.1
14	4.7	1.2	1.5	3.0	2.9	2.9	27	25	25	2.8	2.7	3.4
15	2.6	1.4	1.5	3.1	2.9	2.8	29	22	21	2.5	2.4	2.8
16	2.3	1.4	1.6	3.0	3.0	2.8	31	21	20	2.3	2.7	2.3
17	2.1	1.3	1.7	2.9	3.0	2.8	26	27	19	2.1	2.6	2.1
18	2.2	1.2	1.8	2.9	3.0	2.9	22	65	16	2.0	2.3	1.7
19	2.2	1.2	1.8	3.0	3.1	3.0	33	63	14	4.1	2.1	1.6
20	1.7	1.1	1.9	3.0	3.1	2.9	25	26	12	3.6	1.9	1.5
21	2.1	1.2	2.0	3.0	3.0	2.9	24	16	10	1.4	2.5	1.6
22	2.2	1.3	2.0	2.9	3.0	2.8	22	13	10	.85	2.9	3.3
23	2.3	1.4	2.0	2.9	3.0	2.8	19	11	6.8	.75	1.9	3.6
24	3.1	1.5	2.1	2.9	3.0	2.9	16	18	5.1	.71	1.5	2.1
25	4.7	1.4	2.1	2.9	3.0	3.0	16	23	3.2	.66	1.3	1.8
26	3.4	1.3	2.1	3.0	3.0	3.1	13	22	2.5	.59	1.3	1.7
27	2.9	1.2	2.1	3.1	3.0	3.6	10	32	2.1	4.3	1.3	1.7
28	2.6	1.2	2.2	3.0	3.1	4.0	11	34	2.2	4.9	1.3	2.0
29	2.2	1.2	2.3	3.0	3.1	4.2	15	38	1.9	6.5	1.1	2.0
30	2.1	1.2	2.4	3.0	---	4.6	19	38	1.5	5.6	1.1	2.0
31	2.0	---	2.4	3.0	---	4.8	---	18	---	5.1	1.1	---
TOTAL	77.3	40.3	54.6	89.7	87.0	101.6	544.3	720.4	785.3	116.86	89.7	59.91
MEAN	2.49	1.34	1.76	2.59	3.00	3.28	18.1	23.2	26.2	3.77	2.89	2.00
MAX	4.7	1.9	2.4	3.1	3.2	4.8	33	65	79	8.7	5.5	5.0
MIN	1.7	1.1	1.3	2.4	2.8	2.8	5.0	8.4	1.5	.59	1.1	.62
AC-FT	153	80	108	178	173	202	1080	1430	1560	232	178	119

CAL YR 1987 TOTAL 2806.47 MEAN 7.69 MAX 83 MIN .10 AC-FT 5570
WTR YR 1988 TOTAL 2766.97 MEAN 7.56 MAX 79 MIN .59 AC-FT 5490

09259050 LITTLE SNAKE RIVER BELOW BAGGS, WY

LOCATION.--Lat 41°01'43", long 107°41'14", in SE¼ NW¼ NW¼ sec.7, T.12 N., R.92 W., Carbon County, Hydrologic Unit 14050003, 0.8 mi downstream from Ledford Slough, 1.5 mi southwest of Baggs, and 3.5 mi downstream from bridge on State Highway 789 in Baggs.

PERIOD OF RECORD.--Water years 1981 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (US/CM)	PH (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	BAROMETRIC PRESSURE (MM OF HG)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)
OCT								
01...	1235	0.90	635	8.2	14.0	610	11.2	137
FEB								
01...	1720	91	378	8.2	0.0	600	11.4	99
MAY								
12...	1410	1690	204	7.9	12.0	607	8.8	103
JUL								
12...	1630	5.6	405	8.2	23.0	616	9.9	144

DATE	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOSPHOROUS TOTAL (MG/L AS P)	SELENIUM, DISSOLVED (UG/L AS SE)
OCT							
01...	<1	<0.1	<0.01	--	0.6	0.01	<1
FEB							
01...	<1	0.1	0.04	0.16	0.2	0.02	<1
MAY							
12...	420	<0.1	0.04	0.56	0.6	0.06	<1
JUL							
12...	170	<0.1	<0.01	--	0.5	0.03	<1

PESTICIDE ANALYSIS, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	TEMPERATURE WATER (DEG C)	DICAMBA (MEDIBEN) (BANVEL D) TOTAL (UG/L)	PICLORAM (TORDON) (AMDON) TOTAL (UG/L)	2,4-D, TOTAL (UG/L)	2, 4-DP TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	SILVEX, TOTAL (UG/L)
JUN									
22...	0800	639	17.0	<0.01	<0.01	0.01	<0.01	<0.01	<0.01
JUL									
12...	1630	5.6	23.0	<0.01	0.02	<0.01	<0.01	<0.01	<0.01

09259990 SAND WASH NEAR SUNBEAM, CO

LOCATION.--Lat 40°37'12", long 108°22'06", in NW¼NE¼ sec.26, T.8 N., R.98 W., Moffat County, Hydrologic Unit 14050003, on right upstream pier of triple box culvert on state highway 318, 2.3 mi upstream from confluence with Little Snake River, and 10.5 mi northeast of Sunbeam.

DRAINAGE AREA.--239 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.-- October 1987 to September 1988.

GAGE.--Water-stage recorder. Elevation of gage is 5,790 ft, above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records excellent except for periods of flow, which are poor. No regulation or diversions upstream from station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 25 ft³/s, March 21, 1988, gage height, 1.84 ft; no flow most days each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 25 ft³/s at 1100 March 21, gage height, 1.84 ft; no flow many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	14	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	11	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	5.7	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	4.6	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	4.8	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	5.1	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	5.5	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	5.4	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	5.1	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	5.0	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	5.1	.00	.00	.00	.00	.00	1.1
12	.00	.00	.00	.00	.00	5.3	.00	.00	.00	.00	.00	1.4
13	.00	.00	.00	.00	.00	5.3	.00	.00	.00	.00	.00	1.3
14	.00	.00	.00	.00	.00	5.3	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	5.1	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	5.2	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	5.1	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	5.1	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	5.8	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	11	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	14	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	10	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	1.1	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.11	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	.03	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	2.6	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	14	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	0.00	0.00	16.60	149.90	0.00	0.00	0.00	0.00	0.00	3.80
MEAN	.00	.00	.00	.00	.57	4.84	.00	.00	.00	.00	.00	.13
MAX	.00	.00	.00	.00	14	14	.00	.00	.00	.00	.00	1.4
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.0	.0	.0	.0	33	297	.0	.0	.0	.0	.0	7.5

WTR YR 1988 TOTAL 170.30 MEAN .47 MAX 14 MIN .00 AC-FT 338

09259990 SAND WASH NEAR SUNBEAM, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--February 1987 to September 1988.

REMARKS.--Unpublished water-quality data from 1987 water year are published in this report.

WATER QUALITY DATA, WATER YEARS OCTOBER 1986 TO SEPTEMBER 1988

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO
FEB 12, 1987	1220	0.08	570	8.3	5.5	10.9	48	14	3.2	99	6
MAR 18, 1987	1400	5.3	781	8.4	7.0	10.2	46	14	2.6	140	9
MAR 21, 1988	1315	15	439	--	12.5	--	39	12	2.2	74	5

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)
FEB 12, 1987	0.80	119	150	8.3	0.30	9.1	357	0.49	0.08	0.30
MAR 18, 1987	1.0	133	220	18	0.40	7.6	487	0.66	6.96	0.73
MAR 21, 1988	1.9	--	89	7.6	0.30	14	308	0.42	12.7	1.60

SUSPENDED SEDIMENT DISCHARGE, WATER YEARS OCTOBER 1986 TO SEPTEMBER 1988

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
FEB 12, 1987	1220	0.08	512	0.11
FEB 12, 1987	1221	0.08	443	0.10
MAR 21, 1988	1355	15	9940	411

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEARS OCTOBER 1986 TO SEPTEMBER 1988

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM
MAR 18, 1987	1355	5.4	20300	295	66	79	91	97	99	100
APR 09, 1987	1220	1.0	4130	11	90	97	98	99	100	--

09260000 LITTLE SNAKE RIVER NEAR LILY, CO

LOCATION.--Lat 40°32'50", long 108°25'25", in NW¼NE¼ sec.20, T.7 N., R.98 W., Moffat County, Hydrologic Unit 14050003, on left bank 170 ft downstream from highway bridge, 6.0 mi north of Lily, and 10 mi upstream from mouth.

DRAINAGE AREA.--3,730 mi², approximately.

PERIOD OF RECORD.--June to August 1904 (published as "near Maybell"), October 1921 to current year. Monthly discharge only for some periods, published in WSP 1313.
REVISED RECORDS.--WSP 1713: 1959.

GAGE.--Water-stage recorder. Elevation of gage is 5,685 ft, from river-profile map. June 9 to Aug. 14, 1904, nonrecording gage, and May 5, 1922, to Nov. 30, 1935, water-stage recorder, at site 300 ft upstream at different datums.

REMARKS.--Estimated daily discharges: Oct. 5, and Dec. 14 to Mar. 21. Records good except for estimated daily discharges, which are poor. Diversions for irrigation of about 21,000 acres upstream from station.

AVERAGE DISCHARGE.--67 years, 590 ft³/s; 427,500 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,700 ft³/s, May 18, 1984, gage height, 9.85 ft; maximum gage height, 11.1 ft, Feb. 13, 1962, from floodmark (backwater from ice); no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,500 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
May 20	1100	*4,870	*5.63				

Minimum daily discharge, 1.2 ft³/s, Sept. 6, 9.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.4	79	90	74	96	100	450	1180	2410	333	2.4	2.4
2	8.0	88	119	74	98	105	388	1790	1970	297	3.4	2.4
3	8.3	90	118	75	96	105	348	1760	1690	263	5.2	2.6
4	8.7	109	166	76	100	105	363	1390	1670	246	3.7	2.2
5	9.7	114	151	78	94	105	447	1180	1840	199	2.6	1.9
6	8.4	154	143	80	92	100	670	1140	2240	155	2.6	1.2
7	8.6	147	151	83	92	100	589	1450	2510	204	4.5	1.3
8	9.0	133	137	86	92	105	554	1520	2440	200	3.6	1.6
9	9.0	122	122	88	90	100	875	1210	2300	120	3.0	1.2
10	9.9	131	148	88	92	95	876	1130	2090	87	3.3	2.0
11	11	136	131	89	89	96	690	1220	1910	65	3.1	11
12	12	127	67	90	90	96	539	1380	1770	54	3.6	16
13	14	112	33	91	91	90	507	1590	1710	47	4.4	16
14	20	112	60	96	96	90	595	2100	1570	40	2.8	13
15	19	119	55	95	95	90	815	2680	1400	42	2.7	12
16	20	79	50	90	90	92	968	2850	1240	39	3.3	11
17	50	89	55	93	93	94	1110	2880	1120	33	2.9	9.3
18	59	75	56	94	94	96	1390	3030	1070	18	3.1	11
19	60	73	58	95	95	95	1420	4020	1040	11	2.3	10
20	52	69	60	93	93	120	1430	4480	937	11	1.3	11
21	37	71	60	92	92	400	1640	3410	881	7.5	4.1	13
22	36	103	62	91	91	1470	1610	2460	807	7.5	4.4	16
23	36	130	64	90	90	1980	1620	2090	738	6.6	5.3	17
24	41	144	66	92	92	1510	1390	1950	674	3.9	4.6	14
25	44	155	66	90	90	1230	1200	1990	634	4.6	3.7	12
26	38	179	66	96	100	909	1070	2210	507	4.5	3.5	12
27	42	122	70	98	102	696	997	2320	414	3.8	3.3	11
28	52	85	72	96	100	718	836	2510	394	5.3	3.5	11
29	66	122	74	92	100	800	830	2760	392	4.6	3.7	9.9
30	80	140	74	94	---	645	886	2930	342	2.7	3.1	10
31	82	---	74	96	---	530	---	2890	---	7.1	2.5	---
TOTAL	958.0	3409	2718	2755	2725	12917	27103	67500	40710	2522.1	105.5	265.0
MEAN	30.9	114	87.7	88.9	94.0	417	903	2177	1357	81.4	3.40	8.83
MAX	82	179	166	98	102	1980	1640	4480	2510	333	5.3	17
MIN	7.4	69	33	74	89	90	348	1130	342	2.7	1.3	1.2
AC-FT	1900	6760	5390	5460	5410	25620	53760	133900	80750	5000	209	526

CAL YR 1987 TOTAL 128554.4 MEAN 252 MAX 2170 MIN 2.0 AC-FT 255000
WTR YR 1988 TOTAL 163687.6 MEAN 447 MAX 4480 MIN 1.2 AC-FT 324700

09260050 YAMPA RIVER AT DEERLODGE PARK, CO

LOCATION.--Lat 40°27'02", long 108°31'20", in SE¼SW¼ sec.21, T.6 N., R.99 W., Moffat County, Hydrologic Unit 1405002, in Dinosaur National Monument, on left bank at Deerlodge Park, 1,250 ft upstream from Disappointment Draw, and 5.5 mi downstream from Little Snake River.

DRAINAGE AREA.--7,660 mi², approximately.

PERIOD OF RECORD.--August 1975 and January 1978 (discharge measurements only), April 1982 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 5,600 ft above National Geodetic Vertical Datum of 1929, from topographic map.

AVERAGE DISCHARGE.--6 years, 2,916 ft³/s; 2,113,000 acre-ft/yr. The figure published in the report for 1987 was in error; the correct figure is 5 years, 3,145 ft³/s; 2,279,000 acre-ft/yr.

REMARKS.--Estimated daily discharges: Nov. 21 to Apr. 12, and Sept. 1 to Sept. 13. Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by transbasin diversions, numerous storage reservoirs, and diversions for irrigation of about 86,800 acres upstream from station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 33,200 ft³/s, May 18, 1984, gage height, 19.13 ft; minimum daily, 43 ft³/s, Sept. 5-6, 1988.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 10,000 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
May 20	1630	*14,500	*10.94	June 8	1700	10,500	8.95
May 31	1900	10,700	9.05				

Minimum daily discharge, 43 ft³/s, Sept. 5-6.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	188	425	300	210	250	350	900	4770	9180	2600	264	57
2	185	447	295	215	255	355	1200	6200	7500	2260	280	70
3	190	480	290	217	260	360	1500	6450	6340	1870	285	[illegible]
4	192	496	290	220	265	355	1900	5320	6630	1640	280	45
5	194	534	285	222	265	350	1700	4700	7910	1510	268	43
6	196	569	285	225	255	340	2000	4640	9400	1400	272	43
7	196	562	280	230	250	330	2300	5400	10200	1330	269	44
8	196	541	280	234	245	340	2480	5630	10200	1190	264	47
9	199	521	280	238	240	350	2350	4820	9930	1040	251	52
10	199	530	280	240	235	375	2200	4500	9380	908	241	50
11	201	540	275	243	235	385	2000	4450	8840	806	232	50
12	205	523	270	250	235	370	2100	4740	8640	743	209	64
13	211	499	260	250	235	360	2390	5500	7800	708	[illegible]	86
14	205	523	260	250	240	350	2750	7280	7240	703	160	105
15	208	590	257	250	250	350	4010	9330	6550	639	147	141
16	214	617	260	245	250	350	4860	10400	6160	568	142	286
17	231	580	264	245	260	350	5150	10600	5730	508	140	272
18	324	478	260	245	260	350	6290	11200	6510	460	137	215
19	332	385	255	240	260	380	5990	12300	6220	435	130	196
20	323	351	250	240	250	400	5970	14300	5670	395	126	212
21	303	330	250	235	255	650	6500	12800	5610	376	123	213
22	280	320	240	235	260	1030	6320	9640	4920	352	122	[illegible]
23	283	318	237	237	260	2350	5980	7950	4390	333	121	220
24	307	320	235	240	260	1950	5680	7160	4110	312	115	226
25	334	318	230	245	260	1550	5540	7200	3710	274	110	[illegible]
26	357	318	230	250	270	1200	5140	8030	3370	264	107	232
27	382	318	225	245	290	1000	4960	8550	3020	257	105	237
28	453	310	220	240	305	890	4300	8910	2760	258	100	234
29	442	305	220	240	290	940	3810	9480	3140	251	97	[illegible]
30	431	300	215	245	---	800	4270	10100	2640	243	94	252
31	433	---	210	250	---	700	---	10300	---	246	92	---
TOTAL	8397	13348	7988	7371	7445	20230	112540	243150	193700	24873	5476	4456
MEAN	271	445	258	238	257	653	3751	7844	6457	802	177	149
MAX	453	617	300	250	305	2350	6500	14300	10200	2600	285	286
MIN	188	300	210	210	235	330	900	4450	2640	243	92	43
AC-FT	16660	26480	15840	14620	14770	40130	223200	482300	384200	49340	10860	8840

CAL YR 1987 TOTAL 507618 MEAN 1391 MAX 7800 MIN 140 AC-FT 1007000
WTR YR 1988 TOTAL 648974 MEAN 1773 MAX 14300 MIN 43 AC-FT 1287000

09302450 LOST CREEK NEAR BUFORD, CO

LOCATION.--Lat 40°03'01", long 107°28'06", in SE¼SE¼ sec.15, T.1 N., R.90 W., Rio Blanco County, Hydrologic Unit 14050005, on left bank 15 ft downstream from highway bridge, 500 ft upstream from mouth, 0.5 mi downstream from Long Park Creek, and 9 mi northeast of Buford.

DRAINAGE AREA.--21.5 mi².

PERIOD OF RECORD.--October 1964 to current year.

REVISED RECORDS.--WDR CO-79-3: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 7,560 ft above National Geodetic Vertical Datum of 1929, from topographic map. Oct. 1, 1973, to Sept. 30, 1975, at site 150 ft upstream at present datum.

REMARKS.--Estimated daily discharges: Dec. 9 to Mar. 4. Records fair except for estimated daily discharges, which are poor. No diversion upstream from station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--24 years, 23.7 ft³/s; 17,170 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 944 ft³/s, May 9, 1974, gage height, 7.52 ft, from rating curve extended above 260 ft³/s; minimum daily, 0.30 ft³/s, Jan. 9, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 150 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Apr. [illegible]	[illegible]	179	2.76	May 14	1930	*594	*3.97
Apr. [illegible]	[illegible]	257	3.11				

Minimum daily discharge, 1.1 ft³/s, Sept. 5, 8-10.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.7	4.0	4.7	2.5	3.0	3.0	4.4	153	54	7.1	3.3	1.7
2	[illegible]	7.2	3.4	2.2	3.0	3.0	4.7	96	[illegible]	5.9	[illegible]	1.6
3	2.2	9.2	3.9	2.2	2.5	3.0	5.8	87	43	5.4	2.2	1.5
4	2.7	5.5	3.6	2.7	3.6	3.0	5.0	94	61	5.4	3.3	1.4
5	3.7	4.9	3.6	3.0	[illegible]	3.0	6.3	142	59	6.7	2.4	1.2
6	3.3	5.4	3.5	3.4	[illegible]	3.1	7.2	121	54	4.9	[illegible]	1.4
7	4.7	5.4	3.8	3.4	2.5	3.0	11	115	47	4.4	2.4	1.4
8	[illegible]	4.7	3.7	3.0	2.5	3.2	13	133	41	[illegible]	2.5	1.3
9	3.1	4.2	3.5	3.0	3.0	3.4	16	131	39	[illegible]	2.2	1.3
10	[illegible]	4.6	3.0	3.7	3.0	3.3	16	125	35	4.4	1.5	1.1
11	[illegible]	4.4	3.5	3.0	3.0	3.0	13	145	37	[illegible]	1.7	3.2
12	[illegible]	4.0	3.0	3.0	3.0	[illegible]	[illegible]	[illegible]	37	[illegible]	1.3	4.4
13	[illegible]	3.3	3.0	2.5	3.0	3.2	43	155	[illegible]	3.5	1.5	6.3
14	[illegible]	[illegible]	3.0	3.2	3.0	3.5	52	[illegible]	[illegible]	[illegible]	1.7	4.6
15	[illegible]	4.1	3.0	2.5	3.0	2.7	67	239	40	[illegible]	1.7	3.4
16	4.1	4.1	3.0	3.0	3.0	3.1	84	264	16	7.2	1.5	3.2
17	[illegible]	4.2	3.5	2.5	3.1	3.2	92	261	15	5.6	1.8	3.5
18	3.9	4.5	3.5	2.5	3.0	3.2	96	274	8	7.4	1.5	3.4
19	3.7	4.4	3.5	[illegible]	3.1	3.5	120	[illegible]	25	[illegible]	1.1	2.5
20	[illegible]	4.3	3.0	2.5	3.0	3.3	123	182	19	[illegible]	1.7	2.3
21	4.7	4.3	3.5	2.0	3.0	3.3	115	11[illegible]	1[illegible]	[illegible]	2.0	2.4
22	5.3	4.0	3.5	2.0	3.0	4.3	76	152	11	1.3	2.2	3.0
23	5.2	4.0	3.5	2.5	3.0	4.1	61	136	13	1.3	1.8	2.6
24	4.1	3.9	3.0	2.5	3.0	4.0	59	111	9.2	1.9	1.6	2.2
25	7.0	3.9	2.5	2.5	3.0	3.8	44	110	7.7	1.9	1.6	2.1
26	5.6	4.0	2.5	2.5	3.0	4.1	40	101	7.9	2.3	1.6	1.9
27	4.7	4.0	3.0	2.5	3.0	5.4	42	99	8.3	2.5	2.0	1.9
28	4.3	4.0	3.0	2.5	3.0	5.3	56	93	11	2.2	1.9	2.1
29	4.4	4.0	3.0	2.5	3.0	5.2	84	89	11	2.4	1.7	2.1
30	4.4	4.0	3.0	3.0	---	5.1	157	83	11	2.1	1.6	2.4
31	[illegible]	---	2.5	3.0	---	4.6	---	63	---	2.1	1.6	---
TOTAL	[illegible]	135.4	101.9	83.5	84.0	113.5	1510.4	4736	803.1	99.8	61.2	75.8
MEAN	3.74	4.51	3.29	2.69	2.90	3.66	50.3	153	26.8	3.22	1.97	2.53
MAX	7.0	7.9	4.0	3.0	3.0	5.4	157	329	61	7.1	3.3	6.6
MIN	[illegible]	3.3	2.5	2.0	2.5	3.0	4.4	63	7.7	1.9	1.6	1.3
AC-FT	[illegible]	269	202	160	167	225	3000	9390	1593	198	121	150

CAL YR 1987 TOTAL 5733.4 MEAN 15.8 MAX 274 MIN 2.1 AC-FT 11470
WTR YR 1988 TOTAL 7913.2 MEAN 21.6 MAX 329 MIN 1.3 AC-FT 15710

09303000 NORTH FORK WHITE RIVER AT BUFORD, CO

LOCATION.--Lat 39°59'15", long 107°36'50", in NW¼NW¼ sec.9, T.1 S., R.91 W., Rio Blanco County, Hydrologic Unit 14050005, on right bank 600 ft east of Buford and 1.2 mi upstream from South Fork White River.

DRAINAGE AREA.--260 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1910 to December 1915, July 1919 to December 1923, October 1951 to current year. Monthly discharge only for some periods, published in WSP 1313. Published as North Fork White River near Buford prior to 1951 and as White River at Buford 1951-67. Records for July 1903 to December 1904 at site 6.5 mi upstream not equivalent because of inflow between sites.

REVISED RECORDS.--WSP 1343: 1912. WDR CO-79-3: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 7,010 ft above National Geodetic Vertical Datum of [illegible], from topographic map. May 24, 1910, to May 27, 1914, nonrecording gage at site [illegible] mi upstream at different datum. May 28, 1914, to Dec. 7, 1915, and July 1, 1919, to Oct. 9, 1923, nonrecording gage at present site at different datum.

REMARKS.--Estimated daily discharges: Nov. 30, and Dec. 13 to Feb. [illegible]. Records good except those for estimated daily discharges, which are poor. Diversions upstream from station for irrigation of [illegible] upstream from, and 300 acres downstream from station.

AVERAGE DISCHARGE.--43 years (water years 1911-15, 1920, 1952-88), [illegible] ft³/s; [illegible] acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, [illegible] ft³/s, May [illegible], 1984, gage height, [illegible] ft; maximum gage height, 7.[illegible] ft, Jan. 9, 1961 (backwater from ice); minimum daily discharge, [illegible] ft³/s, [illegible].

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,[illegible] ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
May [illegible]	[illegible]	*1,[illegible]	*[illegible]	June [illegible]	[illegible]	[illegible]	[illegible]
May [illegible]	[illegible]	1,[illegible]	[illegible]				

Minimum daily discharge, 110 ft³/s, Jan. [illegible].

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	[illegible]	193	179	130	150	153	157	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
2	181	219	153	150	167	147	164	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
3	172	188	171	133	140	150	172	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
4	168	172	163	136	[illegible]	141	[illegible]	402	[illegible]	[illegible]	[illegible]	[illegible]
5	174	169	167	143	147	140	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
6	174	173	165	150	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7	178	171	164	150	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
8	156	168	162	150	[illegible]	143	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
9	177	165	157	151	173	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
10	175	180	167	160	[illegible]	149	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
11	174	182	162	155	168	147	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
12	172	178	145	140	[illegible]	153	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
13	173	180	143	[illegible]	165	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
14	190	186	130	140	160	143	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
15	193	185	125	150	150	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
16	194	187	140	150	[illegible]	145	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
17	182	182	150	150	143	147	441	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
18	180	175	150	160	140	145	410	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
19	176	184	150	120	145	147	433	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
20	174	197	140	110	150	148	463	952	[illegible]	[illegible]	[illegible]	[illegible]
21	175	193	150	130	150	155	484	533	[illegible]	[illegible]	[illegible]	[illegible]
22	175	192	150	130	150	164	395	640	[illegible]	[illegible]	[illegible]	[illegible]
23	175	182	140	150	150	159	355	667	[illegible]	[illegible]	[illegible]	[illegible]
24	184	176	130	140	146	165	323	756	[illegible]	[illegible]	[illegible]	[illegible]
25	220	178	130	140	147	157	317	536	[illegible]	[illegible]	[illegible]	[illegible]
26	193	176	130	150	147	157	294	816	[illegible]	[illegible]	[illegible]	[illegible]
27	186	171	140	150	149	179	293	815	[illegible]	[illegible]	[illegible]	[illegible]
28	182	172	140	150	151	182	326	914	[illegible]	[illegible]	[illegible]	182
29	181	189	140	150	148	166	393	940	529	[illegible]	[illegible]	[illegible]
30	199	195	140	160	---	166	539	932	477	[illegible]	[illegible]	182
31	190	---	140	170	---	157	---	743	---	[illegible]	[illegible]	---
TOTAL	5643	5435	4645	4420	4368	4747	9366	24213	23251	[illegible]	[illegible]	[illegible]
MEAN	182	181	150	143	151	153	312	781	775	[illegible]	[illegible]	[illegible]
MAX	220	219	123	170	173	182	539	1390	1090	[illegible]	[illegible]	[illegible]
MIN	168	165	125	110	140	145	157	402	477	[illegible]	[illegible]	174
AC-FT	11190	10780	9210	8770	8660	9420	18580	48030	46120	19???	[illegible]	114??

CAL YR 1987 TOTAL 103813 MEAN 284 MAX 990 MIN 125 AC-FT 205900
WTR YR 1988 TOTAL 108171 MEAN 296 MAX 1390 MIN 110 AC-FT 214600

09303000 NORTH FORK WHITE RIVER AT BUFORD, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1982 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
NOV 20...	1045	215	330	8.5	0.0	11.8	160	50	9.5
MAY 16...	1040	1070	175	7.9	8.0	9.1	83	27	5.1
JUN [illegible]...	1045	675	195	8.1	11.5	8.7	92	27	5.9
AUG [illegible]...	[illegible]	195	325	8.3	11.0	9.1	160	47	9.6

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
NOV [illegible]...	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.1	19	216
MAY [illegible]...	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	14	116
JUN [illegible]...	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	15	123
AUG [illegible]...	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	19	206

DATE	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P)	PHOS-PHOROUS ORTHO, DIS-SOLVED (MG/L AS P)
NOV [illegible]...	[illegible]	[illegible]	<0.01	<0.1	[illegible]	[illegible]	[illegible]	0.02
MAY [illegible]...	[illegible]	[illegible]	<0.01	<0.1	[illegible]	[illegible]	[illegible]	<0.01
JUN [illegible]...	[illegible]	[illegible]	<0.01	<0.1	[illegible]	[illegible]	[illegible]	0.02
AUG [illegible]...	[illegible]	[illegible]	<0.01	<0.1	<0.01	[illegible]	[illegible]	<0.01

DATE	ALUMINUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ANTI-MONY, TOTAL (UG/L AS SB)	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)
NOV [illegible]...	[illegible]	<1	<1	<100	<10	<1	[illegible]	<1	1	[illegible]
MAY 16...	[illegible]	<1	1	<100	<10	<1	2	3	3	1500

DATE	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LITHIUM TOTAL RECOV-ERABLE (UG/L AS LI)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)
NOV [illegible]...	<5	<10	<10	0.20	1	2	<1	<1	500	<10
MAY 16...	<5	<10	40	<0.10	3	5	<1	<1	250	10

09303000 NORTH FORK WHITE RIVER AT BUFORD, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	TUR-BID-ITY (FTU)
OCT						
02...	1350	176	334	--	9.5	--
NOV						
12...	1320	176	288	--	[illegible]	--
DEC						
09...	1450	[illegible]	327	--	0.0	--
JAN						
26...	1220	157	347	--	0.0	--
MAR						
09...	1035	[illegible]	347	--	0.0	--
23...	1105	150	341	--	3.0	--
28...	1030	172	340	8.7	1.0	[illegible]
MAY						
05...	1025	416	[illegible]	8.2	5.5	3.8
12...	1430	623	[illegible]	8.2	7.5	15
17...	1015	767	185	8.0	6.5	7.1
JUN						
03...	1500	716	[illegible]	--	--	--
10...	0930	[illegible]	[illegible]	8.0	7.5	[illegible]
16...	1340	[illegible]	177	--	[illegible]	--
27...	0930	[illegible]	[illegible]	8.2	11.5	[illegible]
JUL						
01...	1050	444	[illegible]	[illegible]	[illegible]	1.7
08...	1025	377	[illegible]	[illegible]	[illegible]	[illegible]
29...	1130	234	[illegible]	--	[illegible]	--
AUG						
02...	1020	[illegible]	[illegible]	--	[illegible]	--
15...	1330	[illegible]	--	--	[illegible]	--
SEP						
[illegible]	[illegible]	[illegible]	[illegible]	--	[illegible]	--

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
NOV					
23...	1045	[illegible]	[illegible]	[illegible]	[illegible]
MAR					
28...	[illegible]	172	14	[illegible]	[illegible]
MAY					
05...	1020	416	[illegible]	[illegible]	[illegible]
12...	1430	623	[illegible]	[illegible]	[illegible]
17...	1015	767	[illegible]	[illegible]	[illegible]
JUN					
03...	1500	716	18	[illegible]	[illegible]
10...	0930	[illegible]	[illegible]	193	[illegible]
21...	1040	[illegible]	[illegible]	[illegible]	[illegible]
27...	0930	[illegible]	11	[illegible]	--
JUL					
01...	1050	444	[illegible]	[illegible]	[illegible]
08...	1025	377	[illegible]	[illegible]	[illegible]
AUG					
02...	1020	260	[illegible]	[illegible]	[illegible]
26...	1045	135	[illegible]	[illegible]	[illegible]

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. FALL DIAM. % FINER THAN .250 MM	SED. SUSP. FALL DIAM. % FINER THAN .500 MM	SED. SUSP. FALL DIAM. % FINER THAN 1.00 MM
MAY									
16...	1240	1070	38	110	68	76	88	98	100

09303300 SOUTH FORK WHITE RIVER AT BUDGE'S RESORT, CO

LOCATION.--Lat 39°[illegible]'[illegible]", long 107°20'03", in NW¼ sec.36, T.2 S., R.89 W., Garfield County, Hydrologic Unit [illegible], on right bank 20 ft upstream from Forest Service trail bridge, 0.2 mi upstream from Wagonwheel Creek, and 5.3 mi northeast of Budge's Resort.

DRAINAGE AREA.--[illegible] mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1976 to current year.

REVISED RECORDS.--WDR CO-79-3: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 8,[illegible] ft above National Geodetic Vertical Datum of 1929, from topographic map. June [illegible], 1976, to July 7, 1976, at site on left bank 50 ft upstream at datum 1.3 ft, lower.

REMARKS.--Estimated daily discharges: Nov. 16-23, Dec. 1-3, 10-31, Jan. 1 to Feb. 26, and June 27 to July 14. Records good except for estimated daily discharges, which are fair. No diversion upstream from station.

AVERAGE DISCHARGE.--12 years, [illegible] ft^3/s; 73,700 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,750 ft^3/s, June 25, 1983, gage height, 6.57 ft, from rating curve extended above [illegible] ft^3/s; minimum daily, 21 ft^3/s, Sept. 29, 30, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 821 ft^3/s at 2100 June 7, gage height, 5.43 ft; minimum daily, [illegible]

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	[illegible]	[illegible]	[illegible]	43	52	47	51	73	[illegible]	94	65	53
2	[illegible]	[illegible]	[illegible]	43	[illegible]	47	[illegible]	[illegible]	[illegible]	[illegible]	64	[illegible]
3	[illegible]	[illegible]	[illegible]	43	46	47	49	66	284	88	62	52
4	[illegible]	[illegible]	[illegible]	[illegible]	45	[illegible]	[illegible]	67	415	[illegible]	61	51
5	[illegible]	[illegible]	[illegible]	[illegible]	46	[illegible]	47	73	546	83	59	51
6	[illegible]	[illegible]	[illegible]	[illegible]	47	[illegible]	49	75	[illegible]	[illegible]	59	51
7	[illegible]	[illegible]	[illegible]	48	48	49	48	[illegible]	673	76	60	51
8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	49	[illegible]	71	629	73	58	52
9	[illegible]	[illegible]	[illegible]	45	[illegible]	49	53	68	607	73	57	50
10	[illegible]	[illegible]	[illegible]	[illegible]	47	[illegible]	[illegible]	70	[illegible]	83	[illegible]	52
11	[illegible]	[illegible]	[illegible]	[illegible]	52	47	[illegible]	79	519	68	56	58
12	[illegible]	[illegible]	[illegible]	45	[illegible]	49	[illegible]	[illegible]	483	67	58	65
13	[illegible]	[illegible]	[illegible]	48	52	47	62	131	454	68	56	69
14	[illegible]	[illegible]	45	48	[illegible]	[illegible]	64	172	[illegible]	68	55	65
15	[illegible]	[illegible]	48	[illegible]	52	54	66	193	284	67	55	63
16	[illegible]	[illegible]	[illegible]	50	[illegible]	49	67	214	271	68	60	63
17	[illegible]	[illegible]	[illegible]	50	50	49	69	240	251	67	59	63
18	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	50	66	261	[illegible]	66	58	62
19	[illegible]	[illegible]	[illegible]	46	50	53	67	243	213	65	56	59
20	[illegible]	[illegible]	[illegible]	44	50	48	67	193	206	64	55	57
21	[illegible]	[illegible]	[illegible]	44	52	47	57	172	190	62	63	58
22	[illegible]	[illegible]	[illegible]	58	[illegible]	47	60	155	176	[illegible]	63	59
23	[illegible]	[illegible]	[illegible]	45	[illegible]	47	62	162	[illegible]	62	57	57
24	[illegible]	[illegible]	[illegible]	45	[illegible]	45	59	156	[illegible]	[illegible]	[illegible]	55
25	[illegible]	[illegible]	46	46	[illegible]	45	58	[illegible]	124	62	53	54
26	[illegible]	[illegible]	[illegible]	48	[illegible]	47	59	227	113	[illegible]	54	53
27	[illegible]	[illegible]	[illegible]	50	[illegible]	48	56	262	105	[illegible]	56	53
28	[illegible]	[illegible]	43	50	48	43	56	301	120	62	53	53
29	[illegible]	[illegible]	[illegible]	[illegible]	47	[illegible]	51	360	103	64	53	53
30	[illegible]	[illegible]	[illegible]	[illegible]	---	52	70	333	97	69	53	54
31	[illegible]	---	[illegible]	[illegible]	---	49	---	256	---	65	53	---
TOTAL	[illegible]	[illegible]	[illegible]	1502	1446	1513	1764	5152	9375	2168	1782	1687
MEAN	[illegible]	[illegible]	[illegible]	48.5	49.9	48.8	58.8	166	312	69.9	57.5	56.2
MAX	[illegible]	[illegible]	[illegible]	52	52	54	70	360	673	94	65	69
MIN	[illegible]	[illegible]	46	44	46	45	47	66	97	62	53	50
AC-FT	[illegible]	[illegible]	[illegible]	2980	2870	3000	3500	10220	18600	4300	3530	3350

CAL YR 1987 TOTAL [illegible] MEAN 82.5 MAX 476 MIN 46 AC-FT 59700
WTR YR 1988 TOTAL [illegible] MEAN 85.1 MAX 673 MIN 44 AC-FT 61750

09303300 SOUTH FORK WHITE RIVER AT BUDGE'S RESORT,CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1982 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1983

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
FEB									
12...	1300	52	138	8.5	0.5	10.2	67	18	5.4
JUN									
07...	1345	562	106	8.3	9.0	8.5	50	13	4.3

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
FEB									
12...	1.9	0.1	2.0	73	4.8	0.9	0.2	10	95
JUN									
07...	0.9	0.1	0.6	52	3.5	0.7	0.2	7.9	62

DATE	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)
FEB								
12...	0.13	13.4	<0.01	0.24	0.01	<0.20	0.03	<0.01
JUN								
07...	0.08	93.8	<0.01	<0.1	0.02	0.40	0.02	<0.01

DATE	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ANTI-MONY, TOTAL (UG/L AS SB)	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)
FEB										
12...	130	<1	<1	<100	<10	1	2	4	5	180
JUN										
07...	350	2	<1	<100	<10	2	1	3	--	270

DATE	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LITHIUM TOTAL RECOV-ERABLE (UG/L AS LI)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)
FEB										
12...	<5	<10	10	<0.10	2	6	<1	<1	120	20
JUN										
07...	47	<10	10	<0.10	5	8	<1	1	73	10

09303300 SOUTH FORK WHITE RIVER AT BUDGE'S RESORT,CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
OCT					AUG				
[illegible]...	1315	54	164	0.0	03...	1125	60	147	10.5
[illegible]									
[illegible]...	1120	69	158	11.0					

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
JUN					
17...	1345	582	18	27	63

09303320 WAGONWHEEL CREEK AT BUDGE'S RESORT, CO

LOCATION.--Lat 39°50'40", long 107°20'10", in SW¼SW¼ sec.25, T.2 S., R.89 W., Garfield County, Hydrologic Unit 14050005, on right bank 60 ft upstream from mouth and confluence of South Fork White River, about 800 ft downstream from private road bridge, and 0.2 mi north-northeast of Budge's Resort.

DRAINAGE AREA.--7.36 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1975 to current year.

REVISED RECORDS.--WDR CO-79-3: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is [illegible] ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 17 to May 17. Records good except for periods of flow below [illegible] ft³/s, which are fair, and those for estimated daily discharges, and periods of flow above [illegible] ft³/s, which are poor.

AVERAGE DISCHARGE.--[illegible] years, 11.0 ft³/s; 7,970 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, [illegible] ft³/s, June 8, 1983, gage height 4.64 ft; no flow many days each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of [illegible] ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
May [illegible]	[illegible]	[illegible]	[illegible]	June [illegible]	[illegible]	*[illegible]	*1.67

No flow many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.01	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.14
2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.11
3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.34
5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.34
6	.03	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
9	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
11	[illegible]	[illegible]	.00	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.33
12	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
13	.03	.03	[illegible]	[illegible]	[illegible]	[illegible]	.01	[illegible]	[illegible]	[illegible]	[illegible]	.47
14	.03	.03	[illegible]	[illegible]	[illegible]	[illegible]	.01	[illegible]	[illegible]	[illegible]	[illegible]	.49
15	[illegible]	.05	[illegible]	[illegible]	[illegible]	.03	.01	[illegible]	[illegible]	[illegible]	[illegible]	.46
16	.03	[illegible]	.03	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.44
17	.03	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.34
18	.03	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.02	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
19	[illegible]	[illegible]	.03	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
20	[illegible]	[illegible]	.00	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
21	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
22	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
23	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
24	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.04	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
25	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	41	[illegible]	[illegible]	[illegible]	[illegible]
26	[illegible]	.03	.03	[illegible]	[illegible]	.04	[illegible]	[illegible]	[illegible]	[illegible]	.10	[illegible]
27	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.17	[illegible]
28	[illegible]	.03	[illegible]	[illegible]	[illegible]	.03	.10	120	[illegible]	[illegible]	[illegible]	[illegible]
29	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.13	152	[illegible]	[illegible]	.11	[illegible]
30	[illegible]	[illegible]	[illegible]	.03	---	.03	.13	129	[illegible]	[illegible]	.10	.30
31	.03	---	[illegible]	.00	---	.00	---	77	---	[illegible]	.06	---
TOTAL	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.97	813.70	1945.7	75.5	16.19	7.74
MEAN	.000	[illegible]	[illegible]	[illegible]	[illegible]	.03	.032	26.2	64.9	2.44	.52	.26
MAX	.01	.35	[illegible]	[illegible]	[illegible]	.03	.10	152	246	4.5	1.3	.51
MIN	.00	.03	[illegible]	[illegible]	[illegible]	.03	.05	.13	4.3	1.1	.06	.20
AC-FT	.02	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.9	1610	3860	150	32	15

CAL YR 1987 TOTAL 3120.16 MEAN 8.55 MAX 115 MIN .00 AC-FT 6190
WTR YR 1988 TOTAL 2865.71 MEAN 7.83 MAX 246 MIN .00 AC-FT 5680

09303320 WAGONWHEEL CREEK AT BUDGES RESORT, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1987 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
JUN 21...	[illegible]	[illegible]	--	8.4	9.0	8.8	120	32	9.4
JUL 14...	[illegible]	[illegible]	285	8.4	12.5	7.5	170	43	14

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
JUN 21...	[illegible]	[illegible]	0.4	111	2.7	0.2	0.2	2.5	116
JUL 14...	[illegible]	--	0.3	163	2.0	0.3	0.2	2.9	--

DATE	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P)	PHOS-PHOROUS ORTHO, DIS-SOLVED (MG/L AS P)
JUN 21...	.16	[illegible]	<0.01	<0.1	<0.01	0.20	0.01	<0.01
JUL 14...	--	--	<0.01	<0.1	<0.01	0.53	0.01	<0.01

DATE	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ANTI-MONY, TOTAL (UG/L AS SB)	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)
JUN 21...	160	2	<1	<100	<10	2	1	2	19	250
JUL 14...	<10	<5	<1	<100	<10	<1	<1	<1	[illegible]	60

DATE	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LITHIUM TOTAL RECOV-ERABLE (UG/L AS LI)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)
JUN 21...	<5	<10	30	<0.10	5	4	<1	[illegible]	50	<10
JUL 14...	<5	<10	40	0.10	2	<1	<1	<1	60	<10

09303320 WAGONWHEEL CREEK AT BUDGES RESORT, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
AUG				
03...	1335	0.37	298	12.5

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
JUN				
07...	1030	154	25	10
07...	1530	154	32	13
JUL				
14...	1345	5.4	6	0.09

09303400 SOUTH FORK WHITE RIVER NEAR BUDGE'S RESORT, CO

LOCATION.--Lat 39°51'51", long 107°32'50", in NW1/4SE1/4 sec.19, T.2 S., R.90 W., Rio Blanco County, Hydrologic Unit 14050005, on right bank on downstream side of Forest Service bridge, 330 ft upstream from South Fork Campground, 10 mi above mouth, and about 10.5 mi southeast of Buford.

DRAINAGE AREA.--128 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1976 to current year.

REVISED RECORDS.--WDR CO-79-3: 1976 (M), 1977, 78 (P), 1978.

GAGE.--Water-stage recorder. Elevation of gage is 7,[illegible] ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 17-22, Dec. 9 to Apr. [illegible], and June 5 to July 19. Records fair except for estimated daily discharges, which are poor. No regulation or diversions upstream from station.

AVERAGE DISCHARGE.--12 years, 215 ft³/s; 155,800 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,770 ft³/s, June 22, 1983, gage height, 6.18 ft; minimum daily, 40 ft³/s, Feb. 1 to Mar. 13, 1980, Dec. 30, 1980, Jan. 13, 15, 1981.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
May [illegible]	2300	1,[illegible]	4.31	June 6	[illegible]	*1,680	*5.14

Minimum daily discharge, 50 ft³/s, Dec. 14-16.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	85	97	90	73	85	75	90	176	593	220	123	92
2	86	100	80	73	95	75	90	164	582	213	119	82
3	86	96	88	67	75	75	95	153	744	200	115	78
4	85	94	77	65	80	75	95	153	1130	195	112	76
5	86	79	78	75	80	75	95	162	1320	190	105	76
6	90	97	71	80	90	90	150	171	1380	185	105	75
7	85	95	82	81	130	93	115	164	1190	180	103	75
8	87	94	80	81	120	90	115	162	1150	175	102	74
9	93	83	79	83	95	90	130	159	1050	173	99	73
10	92	91	71	81	90	90	151	163	1050	165	96	76
11	97	94	73	80	90	80	130	176	1000	160	94	89
12	83	95	78	72	90	75	135	229	930	155	94	111
13	92	92	69	70	97	75	113	333	800	150	93	119
14	102	94	50	80	90	75	120	412	730	145	89	106
15	97	91	50	80	90	75	142	476	660	145	89	99
16	96	81	50	81	100	80	145	540	550	145	95	97
17	93	75	65	81	105	85	157	640	650	143	92	99
18	92	70	80	80	90	100	154	726	510	140	93	103
19	90	70	80	75	70	100	153	679	500	135	90	92
20	87	80	80	75	72	100	151	565	450	132	87	88
21	87	90	75	60	80	100	154	536	450	128	93	91
22	90	100	75	60	80	90	150	457	350	124	104	93
23	91	106	73	65	72	90	143	453	330	122	91	88
24	93	82	70	60	70	90	138	527	300	120	86	85
25	102	80	70	70	83	90	125	629	330	118	84	83
26	96	106	60	75	80	90	143	657	270	120	84	82
27	93	79	60	80	80	90	138	695	400	121	85	81
28	92	57	60	90	80	90	134	849	270	122	85	81
29	93	57	70	90	80	90	139	983	250	124	84	81
30	100	56	70	90	---	90	155	945	230	124	83	81
31	96	---	70	90	---	90	---	690	---	121	81	---
TOTAL	2821	2603	2100	2310	2485	2620	3751	13730	19919	4681	2967	2616
MEAN	91.0	86.8	67.7	74.5	85.7	84.5	125	443	664	151	95.7	87.2
MAX	102	106	90	90	130	100	157	983	1380	220	123	119
MIN	85	56	50	60	70	75	90	153	230	118	81	73
AC-FT	5600	5160	4170	4580	4930	5200	7440	27230	39510	9280	5890	5190

CAL YR 1987 TOTAL 60113 MEAN 165 MAX 945 MIN 50 AC-FT 119200
WTR YR 1988 TOTAL 62603 MEAN 171 MAX 1380 MIN 50 AC-FT 124200

09303400 SOUTH FORK WHITE RIVER NEAR BUDGES RESORT, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1983 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
MAY									
25...	1200	590	190	8.2	4.5	10.5	110	31	7.4
JUN									
30...	1130	262	180	8.6	10.5	8.3	95	26	7.2
JUL									
19...	1415	138	198	8.5	14.0	7.9	103	28	7.9

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
MAY									
25...	1.4	0.1	0.6	102	4.1	0.4	0.1	9.7	116
JUN									
30...	1.4	0.1	0.7	97	4.1	0.6	0.1	12	113
JUL									
19...	1.9	0.1	0.8	104	4.0	0.5	0.1	14	125

DATE	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P)	PHOS-PHOROUS ORTHO, DIS-SOLVED (MG/L AS P)
MAY								
25...	0.16	185	<0.01	0.1	<0.01	<0.20	0.02	<0.01
JUN								
30...	0.15	78.1	<0.01	<0.1	<0.01	<0.20	0.02	<0.01
JUL								
19...	0.16	44.5	0.04	0.1	0.05	<0.20	0.02	0.04

DATE	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ANTI-MONY, TOTAL (UG/L AS SB)	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)
MAY										
25...	250	<1	<1	<100	<10	1	<1	<1	12	420

DATE	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LITHIUM TOTAL RECOV-ERABLE (UG/L AS LI)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)
MAY										
25...	5	<10	10	<0.1	4	<1	<1	1	100	<10

09303400 SOUTH FORK WHITE RIVER NEAR BUDGES RESORT, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
[illegible]	[illegible]	59	200	7.0	APR 14...	1155	112	200	5.0
[illegible]	[illegible]	[illegible]	194	[illegible]	MAY 12...	1315	192	180	8.5
[illegible]	[illegible]	[illegible]	154	0.0	JUN 16...	1135	639	152	8.5
JAN [illegible]	[illegible]	[illegible]	133	0.0	SEP 14...	1520	102	194	7.0
[illegible]	[illegible]	59	197	[illegible]					

[illegible]-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
MAY [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
JUN [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	--
JUL [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

09303500 SOUTH FORK WHITE RIVER NEAR BUFORD, CO

LOCATION.--Lat 39°55'18", long 107°33'04", in NW¼SE¼ sec.36, T.1 S., R.91 W., Rio Blanco County, Hydrologic Unit 14050005, on left bank at upstream side of county bridge, 10 ft downstream from Peltier Creek, and 5.6 mi southeast of Buford.

DRAINAGE AREA.--157 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1903 to October 1906, June 1910 to December 1919, October 1942 to September 1947, April 1967 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 1927: 1944-45, WDR CO-79-3: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 7,[illegible] ft above National Geodetic Vertical Datum of 1929, from topographic map. July 26, 1903, to Oct. 31, 1906, nonrecording gage, and Oct. 1, 1942, to Sept. 30, 1947, water-stage recorder, at site [illegible] ft upstream at different datum. Records for [illegible] at site [illegible] mi downstream not equivalent.

REMARKS.--Estimated daily discharges: Nov. 18, 19, [illegible], Dec. [illegible], Jan. [illegible], Feb. [illegible], Mar. [illegible], and June 11-16. Records good except for estimated daily discharges, which are fair. Diversions for irrigation of about [illegible] acres of hay meadows upstream from station.

AVERAGE DISCHARGE.--[illegible] years (water years [illegible]), [illegible] ft³/s; [illegible] acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, [illegible] ft³/s, June [illegible], gage height, [illegible] ft; maximum gage height, [illegible] ft, June 17, [illegible], site and datum then in use; minimum discharge recorded, [illegible] ft³/s, [illegible], gage height, [illegible] ft, site and datum then in use, but may have been less during periods of no gage-height record.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of [illegible] ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
May [illegible]	[illegible]	[illegible]	[illegible]	June [illegible]	[illegible]	*[illegible]	*[illegible]

Minimum daily discharge, [illegible] ft³/s, [illegible].

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
9	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
12	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
13	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
14	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
15	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
16	138	143	79	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
17	124	115	111	[illegible]	[illegible]	127	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
18	123	110	120	[illegible]	111	110	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
19	121	110	[illegible]	[illegible]	100	121	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
20	117	126	105	90	107	119	211	876	[illegible]	161	130	126
21	117	123	104	80	113	113	212	712	[illegible]	152	143	124
22	118	132	107	80	128	113	214	611	993	158	157	131
23	[illegible]	121	104	80	139	111	[illegible]	[illegible]	[illegible]	154	[illegible]	135
24	120	116	103	80	121	112	194	743	479	153	137	174
25	[illegible]	110	98	90	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
26	126	129	95	100	[illegible]	109	[illegible]	[illegible]	[illegible]	152	[illegible]	[illegible]
27	[illegible]	113	[illegible]	[illegible]	[illegible]	119	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
28	[illegible]	133	[illegible]	[illegible]	[illegible]	115	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
29	121	149	[illegible]	118	121	115	[illegible]	1390	[illegible]	158	[illegible]	[illegible]
30	128	145	[illegible]	117	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
31	126	---	106	116	---	113	---	1020	---	[illegible]	[illegible]	---
TOTAL	3788	3700	3286	[illegible]	3246	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MEAN	122	123	106	104	112	110	[illegible]	638	961	[illegible]	[illegible]	[illegible]
MAX	133	149	129	118	[illegible]	121	[illegible]	1390	1940	[illegible]	[illegible]	[illegible]
MIN	117	110	79	80	90	100	109	207	315	152	[illegible]	[illegible]
AC-FT	7510	7340	6520	6380	6440	6740	10390	39250	57200	[illegible]	[illegible]	[illegible]

CAL YR 1987 TOTAL 84725 MEAN 232 MAX 1390 MIN 79 AC-FT 168100
WTR YR 1988 TOTAL 88520 MEAN 242 MAX 1940 MIN 79 AC-FT 175600

[illegible] SOUTH FORK WHITE RIVER NEAR BUFORD, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1982 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	[illegible]	[illegible]	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.9

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

[illegible]

09304500 SOUTH FORK WHITE RIVER AT BUFORD, CO

LOCATION.--Lat 39°58'29", long 107°37'03", in NW¼NE¼ sec.17, T.1 S., R.91 W., Rio Blanco County, Hydrologic Unit 14050005, on right bank 30 ft downstream from highway bridge, 0.8 mi upstream from mouth, and 1.0 mi south of Buford.

DRAINAGE AREA.--177 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1919 to December [illegible] monthly discharge only, published in WSP [illegible], October [illegible] to current year.

REVISED RECORDS.--WDR CO-79-1: Drainage area.

GAGE.--Water-stage recorder. [illegible]

REMARKS.--[illegible]

AVERAGE DISCHARGE.--[illegible]

EXTREMES FOR PERIOD OF RECORD.--[illegible]

EXTREMES OUTSIDE PERIOD OF RECORD.--[illegible]

[illegible]

09304000 SOUTH FORK WHITE RIVER AT BUFORD, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1984 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

09304000 SOUTH FORK WHITE RIVER AT BUFORD, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

GREEN RIVER BASIN

09304200 WHITE RIVER ABOVE COAL CREEK, NEAR MEEKER, CO

LOCATION.--Lat 40°00'13", long 107°49'29", in NW¼NW¼ sec.3, T.1 S., R.93 W., Rio Blanco County, Hydrologic Unit 14050005, on left bank 40 ft downstream from county road bridge, 2.3 mi upstream from Coal Creek, and 5.7 mi southeast of Meeker.

DRAINAGE AREA.--648 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1961 to current year.

REVISED RECORDS.--WDR CO-79-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is [illegible] ft above National Geodetic Vertical Datum of 1929, from topographic map. Oct. 1, 1961, to Sept. 30, 1975, at site 70 ft upstream at datum 2.00 ft, higher.

REMARKS.--Estimated daily discharges: Nov. 16 to Mar. [illegible]. Records good except for estimated daily discharges, which are poor. Diversions upstream from station for irrigation of about 3,000 acres and about 4,000 acres [illegible] from station.

AVERAGE DISCHARGE.--[illegible] years, [illegible] ft³/s, [illegible] acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, [illegible] ft³/s, June [illegible], gage height, 7.97 ft; minimum [illegible].

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of [illegible] ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
[illegible]	[illegible]	*[illegible] [illegible]	*[illegible] [illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Minimum discharge, [illegible] ft³/s, [illegible].

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	286	[illegible]
2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	264	[illegible]
3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	783	[illegible]	449	272	327
4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	820	[illegible]	[illegible]	[illegible]	[illegible]
5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	474	252	339
6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	383	231	196
7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	351	228	181
8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	358	226	179
9	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	437	748	[illegible]	352	192	177
10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	719	2193	350	179	174
11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	174	[illegible]
12	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	175	[illegible]
13	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	170	336
14	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	154	345
15	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	164	295
16	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	378	[illegible]	291
17	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	175	302
18	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	349	[illegible]	[illegible]	425	178	[illegible]
19	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	733	[illegible]	[illegible]	[illegible]	[illegible]	314
20	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	812	1322	[illegible]	401	[illegible]	301
21	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	984	335	195	299
22	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	777	[illegible]	933	307	238	313
23	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
24	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	643	[illegible]	[illegible]	[illegible]	[illegible]	304
25	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
26	[illegible]	[illegible]	[illegible]	[illegible]	250	[illegible]	677	[illegible]	[illegible]	[illegible]	223	307
27	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	242	335
28	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1400	[illegible]	295	215	338
29	[illegible]	[illegible]	[illegible]	[illegible]	263	[illegible]	625	[illegible]	[illegible]	280	211	350
30	[illegible]	[illegible]	[illegible]	[illegible]	---	[illegible]	742	2003	596	[illegible]	201	369
31	[illegible]	---	[illegible]	[illegible]	---	[illegible]	---	[illegible]	---	277	198	---
TOTAL	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	16837	43736	41279	11909	6478	8329
MEAN	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	561	1411	1376	[illegible]	209	278
MAX	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	501	290	[illegible]
MIN	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
AC-FT	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	16520

CAL YR [illegible] TOTAL [illegible] MEAN [illegible] MAX [illegible] MIN [illegible] AC-FT [illegible]
WTR YR [illegible] TOTAL [illegible] MEAN [illegible] MAX [illegible] MIN [illegible] AC-FT [illegible]

09304200 WHITE RIVER ABOVE COAL CREEK NEAR MEEKER, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--July 1978 to September 1984, October 1986 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: July 1978 to September 1984.
WATER TEMPERATURES: July 1978 to September 1984.

INSTRUMENTATION.--Water-quality monitor July 1978 to September 1984.

REMARKS.--Daily maximum and minimum specific conductance data available in district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, [illegible] microsiemens Dec. [illegible], 1981; minimum [illegible] microsiemens June [illegible], 19[illegible].
WATER TEMPERATURES: Maximum, 22.0°C July 8, 1981; minimum, 0.0°C on many days during winter months.

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
NOV									
[illegible]...	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MAY									
[illegible]...	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
JUN									
[illegible]...	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
AUG									
[illegible]...	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
NOV									
[illegible]...	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MAY									
[illegible]...	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
JUN									
[illegible]...	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
AUG									
[illegible]...	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

DATE	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)
NOV								
[illegible]...	0.17	[illegible]	[illegible]	<0.1	[illegible]	<0.2	[illegible]	[illegible]
MAY								
10...	[illegible]	[illegible]	<0.01	[illegible]	[illegible]	<0.2	[illegible]	[illegible]
JUN								
[illegible]...	[illegible]	[illegible]	<0.01	<0.1	[illegible]	<0.2	[illegible]	[illegible]
AUG								
[illegible]...	[illegible]	[illegible]	<0.01	<0.1	<0.01	[illegible]	[illegible]	[illegible]

GREEN RIVER BASIN

WHITE RIVER ABOVE COAL CREEK NEAR MEEKER, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ANTI-MONY, TOTAL (UG/L AS SB)	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	<1	<1	[illegible]	<1	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	<1	<1	[illegible]	[illegible]	[illegible]	[illegible]

[illegible]

09304200 WHITE RIVER ABOVE COAL CREEK NEAR MEEKER, CO--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

[illegible]

GREEN RIVER BASIN

09304500 WHITE RIVER NEAR MEEKER, CO

LOCATION.--Lat 40°02'[illegible]", long 107°51'42", in NE¼ sec.30, T.1 N., R.93 W., Rio Blanco County, Hydrologic [illegible], on left bank 1.7 mi upstream from Curtis Creek and 2.5 mi east of Meeker.

DRAINAGE AREA.--[illegible] mi².

PERIOD OF RECORD.--[illegible] to December [illegible], October 1909 to current year. Monthly discharge only for some periods, published in WSP [illegible]. Published as "at Meeker" 190[illegible]-13.

REVISED RECORDS.--WDR CO-73-3: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is [illegible] ft above National Geodetic Vertical Datum of 1929, from [illegible]. Prior to Oct. 31, [illegible], and May [illegible] to Aug. 11, [illegible], nonrecording gage, and Aug. 14, 1910, [illegible], water-stage recorder, at site [illegible] mi downstream, at different datum. Oct. [illegible], to [illegible], water-stage recorder at present site, at datum [illegible] ft, higher, prior to Oct. 1, [illegible], and at [illegible] ft, higher, thereafter.

REMARKS.--[illegible] Feb. [illegible]. Records good except for estimated daily discharges, [illegible]. Diversions upstream from station for irrigation of about [illegible],000 acres upstream from station, [illegible] from station. Several observations of specific conductance and water [illegible] are published elsewhere in this report.

AVERAGE DISCHARGE.--[illegible] ft³/s, [illegible] acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, [illegible] ft³/s, May [illegible], gage height, [illegible] ft, maximum gage height, [illegible] ft, [illegible]; minimum daily discharge, 73 ft³/s, July [illegible], 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of [illegible] ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
[illegible]	[illegible]	*[illegible]	*[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

[illegible] ft³/s [illegible].

DISCHARGE, [illegible]
MEAN VALUES

[illegible]

09304800 WHITE RIVER BELOW MEEKER, CO

LOCATION.--Lat 40°00'48", long 108°05'33", in center of sec.31, T.1 N., R.95 W., Rio Blanco County, Hydrologic Unit 14050005, on left bank 30 ft downstream from county bridge, 4.5 mi downstream from Strawberry Creek, and 13 mi west of Meeker.

DRAINAGE AREA.--1,024 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1961 to current year.

REVISED RECORDS.--WDR CO-79-3: Drainage area. WDR CO-86-2: 1985.

GAGE.--Water-stage recorder. Elevation of gage is 5,928 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Dec. 19 to Feb. [illegible]. Records good except for estimated daily discharges, which are poor. Diversion upstream from station for irrigation of about 22,[illegible] acres upstream from station, [illegible] downstream from station.

AVERAGE DISCHARGE.--[illegible] years, [illegible] ft³/s; [illegible] acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, [illegible] ft³/s, June [illegible], 1983, gage height, [illegible] ft; minimum daily, [illegible] ft³/s, [illegible], 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of [illegible] ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
May [illegible]	[illegible]	*[illegible]	*[illegible]	June [illegible]	[illegible]	[illegible]	[illegible]
May [illegible]	[illegible]	[illegible]	[illegible]				

Minimum daily discharge, [illegible] ft³/s, [illegible].

[illegible]

[illegible] WHITE RIVER BELOW MEEKER, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1974 to September 1984, October 1985 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: July 1978 to September [illegible].
WATER TEMPERATURE: July 1978 to September [illegible].

INSTRUMENTATION.--Water-quality monitor July 1978 to September [illegible].

REMARKS.--Unpublished maximum and minimum specific conductance data for period of daily record available in [illegible].

EXTREMES FOR PERIOD OF DAILY RECORD.--
[illegible]
WATER TEMPERATURE: [illegible] during winter months.

[illegible]

[illegible]

GREEN RIVER BASIN

09304800 WHITE RIVER BELOW MEEKER, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ANTI-MONY, TOTAL (UG/L AS SB)	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

09304800. WHITE RIVER BELOW MEEKER, CO--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

[illegible]

09306007 PICEANCE CREEK BELOW RIO BLANCO, CO

LOCATION.--Lat 39°49'34", long 108°10'57", in SE¼SE¼ sec.32, T.2 S., R.96 W., Rio Blanco County, Hydrologic Unit 14050006, on left bank 20 ft downstream from private bridge, 1,100 ft upstream from Stewart Gulch, and 14.3 mi west of Rio Blanco.

DRAINAGE AREA.--177 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1974 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,366 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Dec. 13-20, 24 to Jan. 5, 12-15, 19-26, and Feb. 4-7. Records good except for estimated daily discharges, which are poor. Several diversions upstream from station for irrigation of hay meadows.

AVERAGE DISCHARGE.--14 years, 23.2 ft³/s; 16,810 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 520 ft³/s July 19, 1977, gage height, 7.01 ft, from rating curve based on indirect measurement of peak flow, maximum gage height, 7.47 ft, May 16, 1984; minimum daily discharge, 0.38 ft³/s, July 16, 1988.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 100 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Mar. [illegible]	[illegible]	*101	*3.39	No other peak greater than base discharge.			

Minimum daily, 0.38 ft³/s, July 16.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.3	9.0	11	9.0	12	16	19	29	12	12	6.7	11
2	7.6	9.7	8.4	9.0	11	13	19	38	9.3	11	9.9	11
3	7.2	8.9	8.4	9.0	11	12	24	39	6.9	12	10	11
4	7.0	8.8	8.1	9.0	11	12	51	32	4.2	14	11	11
5	6.4	8.6	8.8	9.0	11	10	57	28	5.1	11	11	11
6	6.4	9.1	8.5	10	10	12	62	20	5.7	10	11	11
7	6.8	8.7	8.4	11	11	13	66	22	6.8	9.3	13	11
8	6.7	8.3	8.8	11	10	12	63	23	6.4	9.6	13	10
9	6.8	8.3	8.6	11	12	11	38	24	5.1	4.5	12	10
10	7.1	9.4	8.4	11	11	12	28	21	3.9	3.8	13	10
11	7.4	9.5	8.8	11	11	9.7	27	23	3.3	3.3	17	12
12	7.0	10	9.0	12	11	11	25	20	2.1	3.5	18	13
13	7.6	11	8.4	11	11	9.9	26	17	4.5	2.2	17	13
14	8.6	10	8.4	12	13	10	26	14	6.6	.79	16	12
15	8.7	11	8.0	11	11	7.9	27	10	7.9	.44	17	11
16	7.3	13	8.2	12	11	8.9	28	9.8	5.2	.38	18	7.8
17	6.1	13	8.2	11	12	8.7	29	8.5	7.1	1.3	18	7.4
18	5.4	14	8.2	11	12	7.7	34	14	4.7	1.3	17	7.7
19	5.4	16	8.4	11	14	7.9	30	16	3.2	1.4	15	6.8
20	4.9	12	8.3	11	10	11	29	16	6.0	1.5	14	3.5
21	4.8	11	8.3	12	10	19	27	16	8.0	1.7	15	3.3
22	8.9	11	8.3	11	9.7	22	30	30	3.0	4.5	14	2.4
23	8.4	11	8.9	12	9.9	20	28	31	5.9	5.4	13	1.9
24	7.4	10	8.6	11	9.8	21	29	12	4.3	4.1	12	.63
25	11	10	8.0	11	9.9	22	38	10	4.2	4.2	12	.51
26	12	11	8.0	12	9.7	29	36	7.5	4.2	5.9	18	.72
27	11	11	8.0	13	11	52	30	10	2.3	7.0	14	.75
28	10	12	8.0	12	16	74	29	7.5	5.5	8.6	11	1.4
29	9.5	11	8.0	11	17	41	29	12	13	5.8	12	.85
30	9.1	10	8.5	11	---	28	29	16	12	2.0	11	1.3
31	8.3	---	9.0	11	---	22	---	15	---	.62	11	---
TOTAL	238.1	316.3	262.9	339.0	329.0	565.7	1013	591.3	178.4	163.13	420.6	214.96
MEAN	7.68	10.5	8.48	10.9	11.3	18.2	33.8	19.1	5.95	5.26	13.6	7.17
MAX	12	16	11	13	17	74	66	39	13	14	18	13
MIN	4.8	8.6	8.0	9.0	9.7	7.7	19	7.5	2.1	.38	6.7	.51
AC-FT	472	627	521	672	653	1120	2010	1170	354	324	834	426

CAL YR 1987 TOTAL 6186.5 MEAN 16.9 MAX 64 MIN 4.6 AC-FT 12270
WTR YR 1988 TOTAL 4632.39 MEAN 12.7 MAX 74 MIN .38 AC-FT 9190

09306007 PICEANCE CREEK BELOW RIO BLANCO, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1974 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: December 1974 to September 1985.
pH: December 1974 to September 1984.
WATER TEMPERATURE: December 1974 to September 1985.
DISSOLVED OXYGEN: December 1974 to September 1984.
SUSPENDED SEDIMENT DISCHARGE: April 1974 to September 1985.

INSTRUMENTATION.--Automatic pumping sediment sampler April 1974 to September 1985. Water-quality monitor December 1974 to September 1985.

REMARKS.--Unpublished maximum and minimum specific conductance data for period of daily record available in district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 1,690 microsiemens June 21, 1976; minimum, 344 microsiemens Apr. 13, 1976.
pH: Maximum, 9.0 units June 21, 1976; minimum, 7.0 units May 24, 1976.
WATER TEMPERATURES: Maximum, 29.5°C July 25, 1977; minimum, freezing point on many days during winter months each year.
DISSOLVED OXYGEN: Maximum, 15.7 mg/L Oct. 8, 1975; minimum, 5.1 mg/L July 17, 1979.
SEDIMENT CONCENTRATIONS: Maximum daily, 20,300 mg/L July 20, 1974; minimum daily, 6 mg/L several days during September 1976.
SEDIMENT LOADS: Maximum daily, 18,620 tons May 16, 1984; minimum daily, 0.02 ton Apr. 20, 1981.

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
FEB										
11...	1330	11	1230	8.3	0.5	12.8	460	93	55	120
MAY										
11...	1030	[illegible]	1160	8.5	7.5	8.0	430	85	52	110
JUN										
28...	1225	5.7	1410	8.0	15.5	10.2	440	79	59	130
JUL										
27...	1330	7.2	1330	8.2	17.0	9.8	470	85	61	140

DATE	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)
FEB										
11...	3	2.7	386	300	20	1.1	15	847	1.15	0.0
MAY										
11...	2	3.0	342	270	16	0.6	16	764	1.04	47.9
JUN										
28...	3	3.8	437	330	20	0.7	14	901	1.22	13.8
JUL										
27...	3	2.9	399	310	21	0.6	14	878	1.19	17.1

DATE	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P)	PHOS-PHOROUS ORTHO, DIS-SOLVED (MG/L AS P)	BORON, DIS-SOLVED (UG/L AS B)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)
FEB										
11...	--	<0.01	1.50	0.04	0.36	0.40	0.03	0.01	170	1800
MAY										
11...	--	<0.01	1.00	0.06	0.54	0.60	0.06	0.02	140	1500
JUN										
28...	--	<0.01	<0.10	0.02	0.48	0.50	0.03	0.01	200	1800
JUL										
27...	0.410	0.01	0.42	0.02	0.58	0.60	0.02	0.01	190	1800

09306007 PICEANCE CREEK BELOW RIO BLANCO, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	COBALT, DIS-SOLVED (UG/L AS CO)	IRON, DIS-SOLVED (UG/L AS FE)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	ZINC, DIS-SOLVED (UG/L AS ZN)
FEB									
11...	1	100	<1	11	19	53	8	2	5
MAY									
11...	2	140	<1	10	15	80	5	3	<3

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
OCT				
01...	1130	7.3	1300	9.0
NOV				
18...	1100	13	1290	3.0
DEC				
14...	1035	15	1430	0.5
JAN				
19...	1420	11	1220	2.0
FEB				
12...	1120	8.3	1180	4.0
MAR				
30...	0910	26	1130	5.5
JUN				
03...	1050	9.2	1350	16.0
AUG				
29...	1148	12	1250	14.5

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
FEB					
11...	0930	11	92	2.7	46
MAY					
11...	0950	23	155	9.6	--
JUL					
27...	1320	7.2	60	1.2	--

09306022 STEWART GULCH ABOVE WEST FORK NEAR RIO BLANCO, CO

LOCATION.--Lat 39°49'09", long 108°11'08", in SE¼NE¼ sec.5, T.3 S., R.96 W., Rio Blanco County, Hydrologic Unit 14050006, on left bank 0.6 mi upstream from mouth, about 300 ft above confluence with West Fork Stewart Gulch, and 14.2 mi west of Rio Blanco.

DRAINAGE AREA.--44.0 mi².

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1974 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1974 to September 1982.
pH: October 1974 to March 1982.
WATER TEMPERATURE: October 1974 to September 1982.
DISSOLVED OXYGEN: October 1974 to March 1982.
SUSPENDED-SEDIMENT DISCHARGE: October 1974 to September 1982.

INSTRUMENTATION.--Water-quality monitor October 1974 to September 1982. Pumping sediment sampler October 1974 to September 1982.

REMARKS.--Unpublished maximum and minimum specific conductance data for period of daily record available in district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 2,200 microsiemens Nov. 10, 1975; minimum, 583 microsiemens Feb. 22, 1982.
pH: Maximum, 8.9 units Dec. 9, 11, 1979; minimum, 7.6 units Oct. 7, 1975.
WATER TEMPERATURES: Maximum, 20.5°C July 3, 1976, June 3, 1977; minimum, 0.0°C Jan. 9, Dec. 17, 1977, Mar. 3, Dec. 2, 3, 1978, Jan. 29, 1979.
DISSOLVED OXYGEN: Maximum, 16.6 mg/L Jan. 13, 1976; minimum, 3.6 mg/L Aug. 19, 20, 1977.
SEDIMENT CONCENTRATIONS: Maximum daily, 1,350 mg/L June 8, 1975; minimum daily, no flow Aug. 7-9, 1975.
SEDIMENT LOADS: Maximum daily, 10 tons estimated June 8, 1975; minimum daily, no flow Aug. 7-9, 1975.

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (US/CM)	PH (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	HARDNESS TOTAL (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)
APR 28...	1155	3.8	1340	8.1	12.5	--	490	79	71	110
JUN 28...	1040	2.5	1320	8.3	11.5	11.0	520	90	72	120

DATE	SODIUM AD-SORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY LAB (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)
APR 28...	2	1.3	322	440	11	0.4	12	930	1.26
JUN 28...	2	1.2	294	360	10	0.2	16	848	1.15

DATE	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NITRITE DISSOLVED (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN,AMMONIA + ORGANIC DIS. (MG/L AS N)	PHOSPHOROUS DISSOLVED (MG/L AS P)	PHOSPHOROUS ORTHO, DISSOLVED (MG/L AS P)	BORON, DISSOLVED (UG/L AS B)	STRONTIUM, DISSOLVED (UG/L AS SR)
APR 28...	9.49	<0.01	2.3	0.03	0.20	0.02	<0.01	80	2300
JUN 28...	5.77	--	--	--	0.70	<0.01	--	80	2700

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (US/CM)	PH (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)
JAN 01...	1500	4.5	1370	--	6.0	--
APR 20...	0930	4.7	1340	8.1	9.0	9.2

09306042 PICEANCE CREEK TRIBUTARY NEAR RIO BLANCO, CO

LOCATION.--Lat 39°50'01", long 108°13'12", in SE¼NE¼ sec.36, T.2 S., R.97 W., Rio Blanco County, Hydrologic Unit 14050006, on left bank 600 ft upstream from mouth and 16.2 mi west of Rio Blanco.

DRAINAGE AREA.--1.06 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1974 to August 1984, May 1985 to current year.

REVISED RECORDS.--WDR CO-79-3: 1977(M). WDR CO-86-2: 1984-85 (M).

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 6,335 ft above National Geodetic Vertical Datum of 1929, from topographic map. Nov. 10, 1980 to June 10, 1981 at datum 0.2' ft, lower.

REMARKS.--Estimated daily discharges: Nov. 16-21, 24 to Dec. 2, 4-5, 7-8, 10-19, 23, 25 to Jan. 18, 21, and Feb. 26 to Mar. 3. Records fair except for estimated daily discharges, which are poor. Most flow this year due to discharge from settling ponds on tract Cb, except for summer thunderstorms.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 506 ft³/s, Aug. 1, 1984, gage height, 6.38 ft, on basis of slope-area measurement of peak flow; no flow many days each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3.1 ft³/s at 1245 Feb. 14, gage height, 1.59 ft; no flow many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.12	.45	.45	.46	.39	.10	.02	.09	.14	.15	.10	.18
2	.10	.54	.40	.44	.40	.07	.01	.11	.11	.18	.17	.19
3	.08	.64	.37	.42	.28	.05	.02	.06	.09	.19	.18	.19
4	.08	.59	.40	.44	.20	.03	.02	.06	.07	.19	[illegible]	.20
5	.11	.80	.45	.46	.20	.04	.04	.05	.06	.19	.22	[illegible]
6	.23	.74	.50	.48	.24	.10	.03	.14	.08	.19	[illegible]	.19
7	.26	.44	.45	.50	.24	.14	.03	.14	.09	.19	[illegible]	.20
8	.29	.44	.40	.44	.37	.04	.01	.12	.10	.19	[illegible]	.19
9	.31	.46	.40	.42	.38	.06	.00	.11	.11	.20	[illegible]	.21
10	.29	.52	.45	.39	.26	.11	.00	[illegible]	.10	.20	[illegible]	.20
11	.35	.59	.40	.34	.33	.05	.02	.02	.10	.20	[illegible]	.21
12	.41	.48	.40	.30	.35	.04	.02	.03	.12	.19	[illegible]	[illegible]
13	.41	.52	.45	.26	.45	.04	.03	.02	.11	.20	.24	.19
14	.43	.46	.40	.22	.50	.13	.02	.04	.10	.21	.23	.18
15	.30	.45	.45	.18	.48	.07	.02	.04	.13	.21	[illegible]	.17
16	.29	.45	.40	.14	.42	.03	.04	.03	.14	.21	.24	.19
17	.33	.44	.45	.10	.33	.02	.03	.08	.15	.21	.23	.19
18	.37	.42	.40	.08	.54	.05	.03	.18	.15	.21	.22	.19
19	.36	.44	.35	.06	.40	.05	.03	.19	.16	.21	.23	.19
20	.32	.46	.30	.08	.27	.09	.03	.12	.18	.21	.25	.20
21	.33	.50	.35	.08	.49	.16	.09	.10	.19	.20	.24	.22
22	.58	.60	.38	.09	.22	.04	.11	.08	.19	.20	.29	.23
23	.65	.72	.40	.12	.18	.05	.06	.09	.18	.19	.24	.23
24	.44	.60	.43	.07	.21	.02	.03	.07	.20	.20	.25	.23
25	1.0	.50	.35	.06	.18	.05	.11	.08	.20	.20	.27	.23
26	.46	.45	.40	.06	.15	.06	.06	.12	.19	.22	.24	.23
27	.44	.44	.44	.15	.18	.06	.03	.08	.20	.21	[illegible]	.24
28	.70	.42	.46	.27	.16	.07	.06	.07	.22	.18	.29	.22
29	.71	.45	.44	.36	.14	.05	.03	.08	.20	.18	.20	.21
30	.51	.42	.42	.34	---	.15	.05	.13	.17	.18	.13	.20
31	.42	---	.44	.37	---	.10	---	.13	---	.19	.13	---
TOTAL	11.68	15.43	12.78	8.20	8.88	2.17	1.21	2.73	4.25	6.13	6.95	6.13
MEAN	.38	.51	.41	.26	.31	.070	.040	.088	.14	.20	.22	.20
MAX	1.0	.80	.50	.50	.54	.16	.11	.18	.22	.22	.29	.24
MIN	.08	.42	.30	.06	.14	.02	.00	.02	.06	.18	.10	.17
AC-FT	23	31	25	16	18	4.3	2.4	5.4	8.4	12	14	12

CAL YR 1987 TOTAL 112.56 MEAN .31 MAX 8.3 MIN .00 AC-FT 223
WTR YR 1988 TOTAL 86.54 MEAN .24 MAX 1.0 MIN .00 AC-FT 172

09306042 PICEANCE CREEK TRIBUTARY NEAR RIO BLANCO, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1974 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1974 to August 1984, April 1985 to February 1986.
pH: February to September 1981.
WATER TEMPERATURE: April 1974 to August 1984, April 1985 to February 1986.
SUSPENDED-SEDIMENT DISCHARGE: April 1974 to September 1982.

INSTRUMENTATION.--Water-quality monitor April 1974 to February 1986. Pumping sediment sampler April 1974 to September 1982.

REMARKS.--Unpublished maximum and minimum values of specific conductance for periods of daily record are available in the district office. Water-quality monitor was moved February 21, 1986 to the discharge pipe of a settling pond on Occidental Petroleum's tract C-b oil shale lease. Daily monitor data subsequent to February 20 are site specific and not published in this report.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 2,570 microsiemens Sept. 16, 1980; minimum observed, 220 microsiemens Jan. 26, 1982.
WATER TEMPERATURES: Maximum, 35.0°C Aug. 6, 1985; minimum, 0.0°C many days during winter months.
SEDIMENT CONCENTRATIONS: Maximum daily, 28,000 mg/L estimated Sept. 3, 1978; no flow many days dry years.
SEDIMENT LOADS: Maximum daily, 900 tons, estimated, Sept. 3, 1978; no flow many days dry years.

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO
FEB											
11...	1030	1.0	2340	9.1	1.0	11.5	55	8.4	7.8	550	34
MAY											
11...	1130	0.03	2400	9.0	22.5	7.3	52	8.2	7.3	620	39
JUN											
28...	1330	0.21	2360	8.9	22.0	6.9	54	7.8	7.9	660	37
JUL											
27...	1247	0.20	2490	8.9	26.5	7.4	46	6.5	6.8	660	44

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	BROMIDE DIS-SOLVED (MG/L AS BR)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)
FEB											
11...	1.9	1300	28	22	12	0.020	12	1430	1.94	4.01	0.75
MAY											
11...	1.8	1290	43	7.9	22	--	11	1500	2.04	0.12	--
JUN											
28...	1.5	1280	59	7.7	20	0.015	11	1490	2.02	0.84	--
JUL											
27...	1.6	1360	60	8.0	18	--	10	1590	2.16	0.86	0.16

DATE	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P)	PHOS-PHOROUS ORTHO, DIS-SOLVED (MG/L AS P)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	OIL AND GREASE, TOTAL RECOV. GRAVI-METRIC (MG/L)	BORON, DIS-SOLVED (UG/L AS B)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)
FEB											
11...	0.04	0.79	0.02	0.28	0.30	0.02	<0.01	2.7	2	690	1300
MAY											
11...	<0.01	0.39	0.03	--	<0.2	0.02	<0.01	--	--	770	1000
JUN											
28...	<0.01	0.12	0.01	0.39	0.40	0.01	0.02	7.0	<1	700	1200
JUL											
27...	0.01	0.17	<0.01	--	0.70	0.02	<0.01	--	--	710	1200

09306042 PICEANCE CREEK TRIBUTARY NEAR RIO BLANCO, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, DISSOLVED (UG/L AS BA)	BERYLLIUM, DISSOLVED (UG/L AS BE)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)
FEB									
11...	<10	<1	600	<10	<1	<1	<1	<1	[illegible]
MAY									
11...	--	1	400	--	--	--	<1	--	[illegible]
JUN									
28...	20	1	300	<10	<1	<1	<1	1	[illegible]

DATE	LEAD, DISSOLVED (UG/L AS PB)	LITHIUM DISSOLVED (UG/L AS LI)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY DISSOLVED (UG/L AS HG)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, DISSOLVED (UG/L AS SE)	VANADIUM, DISSOLVED (UG/L AS V)	ZINC, DISSOLVED (UG/L AS ZN)
FEB									
11...	<5	50	<10	--	[illegible]	3	<1	[illegible]	[illegible]
MAY									
11...	--	[illegible]	<10	--	[illegible]	[illegible]	--	--	[illegible]
JUN									
28...	<5	40	<10	<0.1	[illegible]	<1	<1	[illegible]	[illegible]

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE WATER (DEG C)
NOV				
[illegible]...	1315	0.31	2290	1.0
FEB				
[illegible]...	1200	0.28	2290	6.0
MAR				
30...	1025	0.13	2140	4.0
APR				
13...	[illegible]	[illegible]	[illegible]	[illegible]
JUN				
02...	[illegible]	[illegible]	[illegible]	[illegible]
AUG				
[illegible]...	[illegible]	[illegible]	[illegible]	[illegible]

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
FEB					
11...	1030	1.0	518	1.5	--
MAY					
11...	1130	0.03	149	0.01	54
JUL					
27...	1247	0.20	27	0.01	--

09306058 WILLOW CREEK NEAR RIO BLANCO, CO

LOCATION.--Lat 39°59'14", long 108°14'37", in NW¼NE¼ sec.35, T.2 S., R.97 W., Rio Blanco County, Hydrologic Unit 14050006, on right bank 1,500 ft upstream from mouth and 17.4 mi west of Rio Blanco.

DRAINAGE AREA.--48.4 mi².

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1974 to September 1985, October 1986 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: November 1974 to September 1982.
pH: March 1976 to February 1982.
WATER TEMPERATURE: November 1974 to September 1982.
DISSOLVED OXYGEN: March 1976 to February 1982.
SUSPENDED-SEDIMENT DISCHARGE: October 1974 to September 1982.

INSTRUMENTATION.--Water-quality monitor November 1974 to September 1982. Pumping sediment sampler October 1974 to September 1982.

REMARKS.--Unpublished daily maximum and minimum specific conductance data for period of daily record are available in district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 1,920 microsiemens July 14, 1976; minimum, 528 microsiemens Mar. 18, 1976.
pH: Maximum, 8.8 units Mar. 11, 1980; minimum, 7.4 units June 4, 6, 1980.
WATER TEMPERATURES: Maximum, 30.5°C July 4, 1982; minimum, 0.0°C on many days during winter months each year.
DISSOLVED OXYGEN: Maximum, 13.9 mg/L Mar. 29, 1979; minimum, 3.6 mg/L Sept. 29, 1978.
SEDIMENT CONCENTRATIONS: Maximum daily, 7,030 mg/L July 29, 1979; no flow many days during 1978.
SEDIMENT LOADS: Maximum daily, 61 tons July 29, 30, 1979; no flow many days during 1978.

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
APR										
28...	1130	3.8	1340	8.1	10.5	--	490	70	77	110
JUN										
29...	104[illegible]	[illegible]	[illegible]	8.2	11.5	11.2	520	90	72	120

DATE	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)
APR									
28...	2	1.2	322	440	11	0.4	12	930	1.26
JUN									
29...	2	1.3	294	369	10	0.3	16	848	1.15

DATE	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P)	PHOS-PHOROUS ORTHO, DIS-SOLVED (MG/L AS P)	BORON, DIS-SOLVED (UG/L AS B)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)
APR									
28...	9.49	<0.01	2.30	0.03	0.20	0.02	<0.01	80	2300
JUN									
29...	5.77	--	--	--	0.70	<0.01	--	80	2700

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)
JAN						
01...	1500	4.5	1370	--	6.0	--
APR						
20...	0930	4.7	1340	8.1	9.0	9.2

09306061 PICEANCE CREEK ABOVE HUNTER CREEK NEAR RIO BLANCO, CO

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1974 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1974 to September 1985.
pH: October 1974 to September 1984.
WATER TEMPERATURE: October 1974 to September 1985.
DISSOLVED OXYGEN: October 1974 to September 1984.
SUSPENDED-SEDIMENT DISCHARGE: April 1974 to September 1985.

INSTRUMENTATION.--Automatic pumping sediment sampler April 1974 to September 1985. Water-quality monitor October 1974 to September 1985.

REMARKS.--Unpublished maximum and minimum specific conductance data for period of daily record available in district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum 1,980 microsiemens Jan. 15, 1976; minimum, 440 microsiemens Apr. 15, 1985.
pH: Maximum, 8.9 units Dec. 7, 1977; minimum, 7.4 units Apr. 18, 1979.
WATER TEMPERATURES: Maximum, 26.5°C June 26, 1977; minimum, freezing point on many days during winter months.
DISSOLVED OXYGEN: Maximum, 16.5 mg/L Mar. 21, 22, 1976; minimum, 3.1 mg/L Sept. 10, 1978.
SEDIMENT CONCENTRATIONS: Maximum daily, 15,900 mg/L May 2, 1986; minimum daily, no flow Oct. 4, 5, 1977.
SEDIMENT LOADS: Maximum daily, 27,900 tons estimated Sept. 3, 1977; minimum daily, no flow Oct. 4, 5, 1977.

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
APR										
28...	1430	37	1150	8.1	[illegible]	--	[illegible]	78	52	110
JUN										
29...	1215	6.6	[illegible]	8.2	[illegible]	12.4	[illegible]	77	74	120

DATE	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)
APR									
28...	2	2.5	327	270	15	0.7	14	744	1.01
JUN									
29...	3	3.2	462	410	18	0.7	14	1040	1.41

DATE	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P)	PHOS-PHOROUS ORTHO, DIS-SOLVED (MG/L AS P)	BORON, DIS-SOLVED (UG/L AS B)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)
APR									
28...	74.7	<0.01	1.4	0.06	0.2	0.04	<0.01	130	1400
JUN									
29...	18.5	<0.01	0.16	<0.01	0.8	0.01	<0.01	210	2300

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)
OCT						
01...	1325	20	1440	--	12.5	--
DEC						
15...	1015	9.8	1540	--	0.0	--
APR						
20...	1130	44	1160	8.0	9.0	8.3

09306200 PICEANCE CREEK BELOW RYAN GULCH, NEAR RIO BLANCO, CO

LOCATION.--Lat 39°55'16", long 108°17'49", in sec.32, T.1 S., R.97 W., Rio Blanco County, Hydrologic Unit 14050006, on left bank at downstream side of bridge, 40 ft downstream from Ryan Gulch, and 23 mi northwest of Rio Blanco.

DRAINAGE AREA.--506 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1964 to current year.

REVISED RECORDS.--WDR CO-79-3: 1977(M).

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 6,370 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Dec. 13, 14, 16-18, 24 to Jan. 31, and Feb. 4-5. Records good except for estimated daily discharges, which are fair. Diversions for irrigation upstream from station.

AVERAGE DISCHARGE.--24 years, 32.6 ft^3/s; 23,620 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 553 ft^3/s, May 3, 1984, gage height, 7.79 ft; maximum gage height, 7.91 ft, May 25, 1984; minimum daily discharge, 0.15 ft^3/s, June 7, 1981.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 100 ft^3/s, and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Mar. [illegible]	[illegible]	*114	*5.77	Mar. 29	1630	103	5.73

Minimum daily discharge, 6.6 ft^3/s, May 22.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	[illegible]	[illegible]	[illegible]	[illegible]	33	71	46	47	15	11	14	22
2	[illegible]	[illegible]	[illegible]	[illegible]	37	52	45	51	14	11	16	22
3	[illegible]	[illegible]	37	27	31	47	49	56	14	12	15	21
4	[illegible]	[illegible]	38	36	33	41	73	45	14	13	17	21
5	[illegible]	38	[illegible]	36	35	42	57	46	14	15	19	21
6	[illegible]	33	[illegible]	[illegible]	33	44	71	39	15	12	[illegible]	21
7	[illegible]	[illegible]	[illegible]	26	33	46	77	41	17	12	20	21
8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	47	73	41	15	12	21	19
9	[illegible]	33	[illegible]	[illegible]	28	47	59	40	17	12	21	18
10	[illegible]	[illegible]	[illegible]	[illegible]	29	44	52	35	15	12	21	19
11	[illegible]	[illegible]	[illegible]	25	28	45	51	32	13	11	21	20
12	[illegible]	[illegible]	[illegible]	24	33	[illegible]	49	27	12	11	24	23
13	[illegible]	[illegible]	[illegible]	24	33	36	47	21	13	10	24	23
14	[illegible]	[illegible]	[illegible]	24	32	[illegible]	51	17	11	11	23	24
15	[illegible]	[illegible]	39	24	32	37	51	15	11	9.2	24	21
16	[illegible]	[illegible]	43	34	31	38	52	14	12	9.9	27	20
17	[illegible]	[illegible]	35	22	33	35	59	10	13	9.7	30	19
18	34	[illegible]	35	23	31	34	57	11	12	10	25	19
19	34	43	35	22	32	37	58	14	12	9.9	27	20
20	37	41	[illegible]	27	32	42	53	13	9.6	10	28	18
21	[illegible]	41	37	23	31	48	55	6.8	9.4	10	35	21
22	33	42	36	25	34	57	59	6.6	11	11	37	19
23	34	41	37	28	33	54	55	9.1	11	11	33	18
24	35	41	34	30	35	55	58	10	12	12	32	17
25	37	39	[illegible]	34	37	51	68	9.0	11	13	32	16
26	[illegible]	41	43	32	39	56	63	11	12	12	32	16
27	[illegible]	41	[illegible]	30	43	70	53	11	12	11	38	16
28	[illegible]	37	27	30	66	90	47	11	13	13	[illegible]	15
29	37	39	27	30	76	64	46	10	10	13	22	14
30	33	37	26	[illegible]	---	57	45	11	11	14	22	15
31	34	---	23	29	---	51	---	14	---	15	22	---
TOTAL	1037	1177	1104	824	991	1495	1711	727.0	382.0	357.7	783	578
MEAN	33.5	39.2	35.6	26.6	34.2	48.2	57.0	23.5	12.7	11.5	25.3	19.3
MAX	38	44	41	34	76	90	79	56	17	15	38	24
MIN	29	37	26	22	28	33	45	6.6	9.4	9.2	14	14
AC-FT	2060	2330	2190	1630	1970	2970	3390	1440	758	709	1550	1150

CAL YR 1987 TOTAL 15365 MEAN 42.1 MAX 131 MIN 18 AC-FT 30480
WTR YR 1988 TOTAL 11166.7 MEAN 30.5 MAX 90 MIN 6.6 AC-FT 22150

09306200 PICEANCE CREEK BELOW RYAN GULCH NEAR RIO BLANCO, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 1970 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: December 1979 to September 1982, November 1985 to current year.
WATER TEMPERATURE: December 1979 to September 1982, November 1985 to current year.
SUSPENDED-SEDIMENT DISCHARGE: October 1972 to September 1983.

INSTRUMENTATION.--Automatic pumping sediment sampler October 1972 to September 1983. Water-quality monitor December 1979 to September 1982, November 1985 to current year.

REMARKS.--Unpublished maximum and minimum specific conductance data for the periods of daily record are available in the district office. Interruptions in the daily record are due to instrument malfunctions.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum 2,920 microsiemens July 18, 1981; minimum, 520 microsiemens July 18, 1981.
WATER TEMPERATURES: Maximum 26.5°C June 22, 1981; minimum, 0.0°C on many days during the winter period.
SEDIMENT CONCENTRATIONS: Maximum daily, 21,700 mg/L July 20, 1977; minimum daily, 8 mg/L Oct. 14, 1979, several days in Sept. 1981.
SEDIMENT LOADS: Maximum daily, 5,390 tons July 23, 1983; minimum daily, 0.05 ton Sept. 27, 30, 1981.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Not determined.
WATER TEMPERATURES: Maximum 25.7°C June 25; minimum, 0.0°C several days during the winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
FEB										
11...	1230	28	1440	8.8	2.5	12.2	500	84	70	140
MAY										
11...	1315	33	1460	8.4	14.0	12.3	550	89	79	150
JUN										
29...	1345	11	1930	8.2	16.5	9.5	670	84	110	230
JUL										
27...	1430	11	1930	8.3	18.5	9.2	610	76	100	210

DATE	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)
FEB									
11...	3	2.2	422	400	14	0.8	15	988	1.34
MAY									
11...	3	2.8	374	410	15	0.6	17	994	1.35
JUN									
29...	4	3.3	537	520	19	0.7	17	1310	1.78
JUL									
27...	4	2.9	529	540	20	0.6	18	1290	1.75

DATE	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P)	PHOS-PHOROUS ORTHO, DIS-SOLVED (MG/L AS P)	BORON, DIS-SOLVED (UG/L AS B)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)
FEB									
11...	0.0	<0.01	1.40	0.02	0.40	0.02	<0.01	150	2700
MAY									
11...	87.8	<0.01	0.80	0.03	0.60	0.02	0.02	160	2900
JUN									
29...	37.5	<0.01	<0.10	0.02	0.90	0.05	0.02	250	3700
JUL									
27...	39.7	<0.01	0.16	0.01	1.6	0.06	0.03	260	3400

09306200 PICEANCE CREEK BELOW RYAN GULCH NEAR RIO BLANCO, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	COBALT, DIS-SOLVED (UG/L AS CO)	IRON, DIS-SOLVED (UG/L AS FE)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	ZINC, DIS-SOLVED (UG/L AS ZN)
FEB									
11...	1	110	<1	8	14	9	7	<1	6
MAY									
11...	2	87	<1	9	15	10	6	5	<3

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
FEB					
11...	1214	33	264	22	65
MAY					
11...	1315	33	226	20	70
JUL					
27...	1410	11	35	1.1	--

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1590	---	1540	---	---	951	1360	1270	1920	1870	1790	1620
2	1590	---	1540	---	---	1160	1360	1270	1920	1850	1760	1640
3	1570	---	1550	---	---	1280	1330	1270	1920	1830	1740	1660
4	1540	---	1560	---	---	1310	1120	1260	1880	1870	1750	1650
5	1570	---	1550	---	---	1350	1130	1270	1860	1830	1690	1680
6	1560	---	1550	---	---	1310	1090	1310	1870	1890	1660	1690
7	1530	---	1560	---	---	1280	1030	1320	1870	1900	1660	1690
8	---	---	1560	---	---	1270	1020	1320	1860	1910	1660	1720
9	---	---	1580	---	---	1360	1210	1330	1840	1920	1650	1730
10	---	---	1590	---	---	1270	1280	1360	1820	1930	1640	1720
11	---	---	1580	---	---	1360	1310	1430	1830	1950	1650	1690
12	---	---	1590	---	---	1390	1270	1490	1840	1950	1630	1660
13	---	---	1580	---	---	1400	1260	1540	1820	1930	1640	1660
14	---	---	1620	---	---	1410	1230	1550	1810	1870	1650	1640
15	---	---	1580	---	---	1370	1250	1560	1840	1870	1660	1650
16	---	---	---	---	---	1350	1150	1570	1840	1860	1650	1670
17	---	---	---	---	---	1380	1140	1600	1830	1880	1620	1670
18	---	---	---	---	---	1390	1220	1650	1830	1880	1630	1670
19	---	1520	---	---	---	1350	1240	1660	1840	1890	1620	1660
20	---	1510	---	---	---	1290	1180	1650	1880	1870	1580	1690
21	---	1490	---	---	---	1210	1220	1830	1920	1860	1520	1660
22	---	1510	---	---	---	1090	1200	1870	1900	1960	1530	1680
23	---	1510	---	---	1400	1160	1220	1820	1910	1860	1540	1710
24	---	1510	---	---	1390	1180	1220	1800	1930	1870	1520	1720
25	---	1510	---	---	1380	1260	1130	1820	1950	1870	1500	1720
26	---	1510	---	---	1320	1190	1190	1820	1960	1880	1490	1720
27	---	1520	---	---	1240	1090	1230	1840	1920	1890	1450	1720
28	---	1530	---	---	979	949	1250	1880	1900	1860	1500	1730
29	---	1530	---	---	918	1110	1250	1920	1920	1870	1560	1730
30	---	1540	---	---	---	1250	1260	1900	1890	1860	1570	1730
31	---	---	---	---	---	1310	---	1880	---	1820	1590	---

09306200 PICEANCE CREEK BELOW RYAN GULCH NEAR RIO BLANCO, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	14.6	5.3	11.1	7.9	2.3	.0	---	---	2.5	1.3	7.1	2.4
2	14.9	5.4	10.9	7.7	4.4	.5	---	---	2.5	1.4	6.3	3.2
3	14.4	5.5	9.2	6.5	6.2	1.9	---	---	2.7	1.6	9.1	3.6
4	13.5	5.5	10.1	4.3	5.6	1.5	---	---	2.3	.5	7.6	3.4
5	14.2	5.8	9.6	3.7	5.6	3.7	---	---	.9	.1	7.4	1.1
6	14.3	5.4	9.8	6.1	6.6	3.9	---	---	.2	.0	7.1	2.0
7	13.5	5.4	7.2	4.2	6.6	2.7	---	---	.9	.0	5.5	1.6
8	12.6	6.6	9.0	4.5	3.4	.2	.0	.0	3.0	.3	6.8	.3
9	12.6	5.5	8.0	2.5	2.7	.0	.1	.0	3.9	.4	8.1	1.8
10	13.4	6.4	4.7	2.5	6.3	2.5	.0	.0	4.7	1.8	5.8	2.3
11	13.0	5.1	6.4	3.4	4.9	2.4	.0	.0	4.9	.2	4.5	.7
12	10.2	4.7	6.6	1.6	2.2	.0	.1	.0	5.1	.4	3.8	.7
13	10.7	8.6	6.9	3.0	.0	.0	.1	.0	4.0	.5	3.9	.7
14	9.8	7.3	6.6	3.8	.0	.0	.0	.0	3.6	.2	4.9	.7
15	12.9	6.9	4.8	.5	.1	.0	.0	.0	3.8	.3	5.6	1.7
16	12.0	5.7	3.1	.0	.1	.1	.0	.0	3.3	.2	5.0	2.0
17	11.1	3.6	2.3	.0	---	---	.0	.0	2.8	.3	4.5	1.0
18	10.3	4.1	.9	.0	---	---	.0	.0	2.0	.1	5.8	1.3
19	10.5	3.4	2.3	.0	---	---	.0	.0	2.4	.3	7.1	2.3
20	9.7	2.0	3.9	.0	---	---	.1	.0	4.2	.4	7.7	3.8
21	9.3	1.7	4.5	.0	---	---	.0	.0	4.6	.7	8.5	4.4
22	10.1	2.9	4.2	.7	---	---	.0	.0	6.1	1.0	7.8	4.7
23	8.2	3.5	5.2	1.4	---	---	.0	.0	6.3	.1	7.9	4.2
24	10.3	6.9	4.8	1.3	---	---	.1	.0	6.2	.3	7.7	4.3
25	12.8	7.9	3.2	.0	---	---	.1	.0	6.8	.2	7.1	3.5
26	11.6	5.0	3.0	.9	---	---	.1	.0	7.1	.5	9.9	4.1
27	10.7	4.4	4.3	.7	---	---	.1	.0	7.5	1.0	8.6	4.6
28	9.4	4.0	2.1	.0	---	---	.0	.0	7.0	2.5	7.1	1.7
29	11.6	6.9	2.7	.0	---	---	.0	.0	7.5	1.6	5.4	.0
30	10.0	7.6	2.7	.0	---	---	2.0	.0	---	---	4.4	2.4
31	10.7	5.7	---	---	---	---	2.9	1.2	---	---	8.1	1.3
MONTH	14.9	1.7	11.1	.0	---	---	---	---	7.5	.0	9.9	.0
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	11.1	6.9	18.5	5.4	21.2	10.4	19.4	12.1	20.6	10.2
2	---	---	9.4	4.0	23.3	8.7	21.8	11.2	21.3	11.4	19.5	10.4
3	---	---	18.3	3.7	24.1	9.2	20.2	11.8	23.3	13.5	19.3	9.8
4	---	---	12.9	5.4	21.7	9.3	19.1	12.9	22.8	13.0	19.5	9.7
5	---	---	14.6	5.3	20.7	11.0	21.4	11.4	21.9	10.4	19.3	8.7
6	---	---	11.6	6.3	19.7	9.3	22.5	11.8	19.6	12.9	18.1	9.0
7	---	---	12.7	4.0	21.0	7.3	22.0	11.2	19.1	12.0	18.8	10.1
8	---	---	13.5	6.2	21.7	6.2	22.2	11.4	19.3	10.8	19.3	8.8
9	---	---	15.4	6.0	22.7	7.2	18.7	10.8	20.9	10.0	18.0	8.9
10	---	---	17.4	7.6	20.9	8.3	20.7	9.9	19.5	9.7	16.1	11.6
11	---	---	19.1	6.0	23.1	9.0	22.3	11.6	19.7	10.3	12.9	10.0
12	---	---	20.7	7.0	23.2	8.9	22.8	11.7	18.3	12.7	10.3	9.0
13	---	---	20.2	8.1	18.1	9.4	23.9	10.7	20.8	10.3	14.4	8.2
14	14.2	6.4	21.2	8.8	22.7	7.6	23.6	12.0	21.4	10.5	12.8	8.4
15	13.9	8.5	22.0	7.2	20.9	7.7	19.6	10.9	17.8	12.1	15.5	6.8
16	13.6	6.3	21.5	8.4	22.1	8.7	20.3	10.8	21.0	12.2	16.5	8.0
17	10.3	6.9	17.0	11.1	21.9	8.8	21.7	10.4	18.8	13.1	16.2	8.6
18	11.8	4.6	15.0	8.8	22.3	9.9	23.2	10.2	20.6	10.9	14.2	8.4
19	13.4	7.1	11.6	8.4	23.0	9.6	22.5	9.6	21.5	11.0	13.2	4.6
20	12.9	6.9	16.5	6.4	21.8	11.6	22.7	9.5	17.9	11.5	15.0	6.6
21	9.8	6.7	18.4	5.8	21.4	11.9	22.9	9.6	16.8	14.1	14.0	3.7
22	10.2	5.6	21.3	6.1	24.5	11.7	23.4	10.0	21.2	12.4	12.5	8.6
23	11.9	4.8	23.6	6.0	22.9	12.5	20.2	11.5	21.5	12.3	15.2	6.8
24	11.0	6.3	19.3	7.4	25.0	12.9	22.2	10.2	20.5	12.4	14.8	7.8
25	9.2	5.9	16.9	8.0	25.7	13.4	21.9	10.8	20.8	12.2	15.1	7.6
26	12.3	2.9	17.6	7.7	22.9	13.5	21.7	11.6	18.2	12.8	12.6	7.3
27	13.7	4.8	20.6	8.7	24.7	12.8	19.1	11.8	18.6	12.6	14.9	7.6
28	13.4	6.2	22.0	7.1	17.3	13.4	19.6	12.0	18.2	11.4	11.8	6.6
29	16.6	7.5	18.2	7.6	18.6	11.9	23.4	11.5	18.2	10.9	11.9	4.0
30	15.5	7.1	15.2	7.3	23.1	10.4	22.3	11.5	18.2	11.1	15.2	6.0
31	---	---	15.9	5.8	---	---	22.6	13.8	17.8	10.9	---	---
MONTH	---	---	23.6	3.7	25.7	5.4	23.9	9.5	23.3	9.7	20.6	4.0

09306222 PICEANCE CREEK AT WHITE RIVER, CO

LOCATION.--Lat 40°05'16", long 108°14'35", in SW¼NE¼ sec.2, T.1 N., R.97 W., Rio Blanco County, Hydrologic Unit 14050006, on left bank 900 ft upstream from mouth, 1.0 mi west of White River City, and 17 mi west of Meeker.

DRAINAGE AREA.--652 mi².

PERIOD OF RECORD.--October 1964 to September 1966, October 1970 to current year.

REVISED RECORDS.--WDR CO-82-3: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 5,795 ft above National Geodetic Vertical Datum of 1929, from topographic map. Oct. 1, 1964, to Sept. 30, 1966, and Oct. 1, 1970, to July 12, 1974, at several sites 1.1 mi upstream at different datums.

REMARKS.--Estimated daily discharges: Nov. 14-18, Dec. 12 to Mar. 2, Mar. 8-9, 12-14, and Mar. 17-18. Records good except for estimated daily discharges, which are poor. Diversions for irrigation of about 5,500 acres upstream from station.

AVERAGE DISCHARGE.--20 years, 41.7 ft³/s; 30,210 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 628 ft³/s, Sept. 7, 1978, gage height, 7.04 ft, on basis of slope-area measurement of peak flow; minimum daily, 0.50 ft³/s, July 21-22, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 100 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Mar. 28	1410	*136	*3.62	Apr. 8	1555	103	3.41

Minimum daily discharge, 3.6 ft³/s, June 25.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	46	40	35	34	99	53	55	12	9.0	17	26
2	31	43	43	32	33	100	54	64	10	6.7	19	27
3	31	46	38	31	35	76	57	70	9.9	7.5	23	25
4	30	47	39	30	35	73	75	65	9.8	9.7	27	25
5	29	43	40	30	34	50	80	61	9.4	12	25	25
6	29	53	43	29	33	57	80	54	8.0	13	26	25
7	30	49	44	29	32	53	86	54	7.9	11	30	24
8	32	47	44	27	32	50	87	55	8.2	11	26	23
9	34	47	44	27	32	52	72	54	7.9	10	27	19
10	36	49	43	30	31	55	56	48	7.9	14	26	15
11	35	51	44	35	32	42	57	36	8.1	16	23	17
12	34	51	45	32	33	39	55	32	8.0	14	23	19
13	36	53	45	30	34	39	58	26	7.8	11	24	19
14	37	52	45	29	35	38	62	20	8.5	12	25	19
15	37	50	45	29	36	42	63	19	9.4	14	25	18
16	38	40	43	29	36	45	64	17	9.9	11	25	16
17	37	40	40	28	34	44	70	16	11	10	24	15
18	38	40	40	27	35	41	80	16	12	10	24	15
19	37	50	40	26	36	42	73	14	9.4	11	21	15
20	37	52	40	26	36	64	71	16	9.1	11	20	16
21	36	51	42	27	35	76	68	13	5.2	12	26	17
22	39	51	40	30	37	80	71	11	5.8	13	31	21
23	41	50	42	33	36	71	72	12	4.9	12	30	19
24	42	51	38	35	39	71	72	12	4.5	13	26	17
25	45	50	35	37	42	64	79	12	3.6	13	30	17
26	44	49	33	34	45	68	77	13	3.7	16	30	19
27	44	49	33	34	50	84	69	14	4.5	14	32	21
28	44	42	32	34	70	103	61	13	5.4	14	31	24
29	45	44	32	34	80	51	59	12	11	15	29	23
30	48	43	30	33	---	67	57	12	9.4	16	28	23
31	47	---	32	34	---	60	---	12	---	17	26	---
TOTAL	1153	1436	1234	956	1116	1899	2038	928	242.2	378.9	799	604
MEAN	37.2	47.9	39.8	30.8	38.5	61.3	67.9	29.9	8.07	12.2	25.8	20.1
MAX	48	53	45	37	80	103	87	70	12	17	32	27
MIN	29	40	30	26	32	38	53	11	3.6	6.7	17	15
AC-FT	2290	2850	2450	1900	2210	3770	4040	1840	480	752	1580	1200

CAL YR 1987 TOTAL 17451 MEAN 47.8 MAX 147 MIN 18 AC-FT 34610
WTR YR 1988 TOTAL 12784.1 MEAN 34.9 MAX 103 MIN 3.6 AC-FT 25360

09306224 WHITE RIVER ABOVE CROOKED WASH, NEAR WHITE RIVER CITY, CO

LOCATION.--Lat 40°09'44", long 103°20'33", in NW¼NW¼ sec.12, T.2 N., R.98 W., Rio Blanco county, Hydrologic Unit 14050005, on right bank 15 ft upstream from County Road 77 bridge, 2.8 mi upstream from Crooked Wash, 9.8 mi downstream from Piceance Creek and 8.0 mi northwest of White River City.

DRAINAGE AREA.--1,821 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1982 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 5,590 ft above National Geodetic Vertical Datum of 1929, from topographic map. Oct. 1, 1982 to Aug. 15, 1983, at site 0.25 mi upstream, at datum 3.12 ft, higher.

REMARKS.--Estimated daily discharges: Dec. 16 to Mar. 7. Records good except for estimated daily discharges, which are poor. Diversions upstream from station for irrigation of about 31,900 acres.

AVERAGE DISCHARGE.--6 years, 1,017 ft^3/s; 736,800 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,370 ft^3/s, June 7, 1984, gage height, 8.05 ft; minimum daily, 280 ft^3/s, Jan. 20, 1988.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,120 ft^3/s at 1600 May 18, gage height, 5.85 ft; maximum gage height, 7.08 ft, Jan. 29 (backwater from ice); minimum daily discharge, 280 ft^3/s, Jan. 20.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	355	452	496	340	380	440	502	1040	1460	732	379	357
2	358	486	501	335	370	450	503	1090	1250	687	373	350
3	363	479	486	330	360	460	542	1000	1350	663	370	360
4	357	446	429	330	350	470	588	892	1720	691	509	347
5	360	435	429	330	340	450	610	885	2250	880	413	344
6	359	452	448	330	330	460	619	1050	2680	645	380	326
7	364	447	430	330	350	480	628	1010	2700	592	407	319
8	369	441	427	350	380	502	698	933	2720	582	386	302
9	364	429	411	360	400	523	642	951	2590	536	372	302
10	362	418	416	360	400	545	561	890	2520	537	355	300
11	364	434	439	370	390	489	547	882	2500	549	348	311
12	371	444	436	380	390	456	569	1030	2270	532	342	446
13	381	436	479	370	390	480	633	1350	2080	510	360	585
14	406	444	468	310	390	446	713	1760	1820	516	357	502
15	423	474	418	330	390	461	706	2110	1570	466	344	441
16	422	422	364	340	390	468	750	2100	1500	458	366	405
17	425	417	360	330	390	465	833	2250	1450	484	352	399
18	423	583	410	320	380	431	872	2740	1340	489	355	405
19	416	560	425	310	380	436	869	2860	1270	480	355	415
20	419	532	425	280	380	503	874	2410	1250	439	347	422
21	413	541	410	310	380	631	899	1750	1150	479	371	409
22	419	575	420	320	390	732	886	1400	1080	446	410	441
23	413	449	425	310	400	689	815	1300	1080	434	413	460
24	426	420	400	300	400	717	785	1360	1000	355	406	446
25	525	412	370	300	400	588	772	1560	897	337	386	446
26	482	460	340	310	390	597	811	1680	807	340	391	434
27	436	446	320	320	390	689	715	1630	799	364	455	455
28	426	415	320	330	410	839	718	1810	802	372	417	441
29	429	495	330	340	420	630	748	2080	964	373	386	440
30	441	569	340	360	---	548	815	2250	839	372	378	457
31	466	---	350	380	---	538	---	1920	---	357	369	---
TOTAL	12537	14013	12722	10315	11110	16613	21223	48028	47708	15697	11852	12067
MEAN	404	467	410	333	383	536	707	1549	1590	506	382	402
MAX	525	583	501	380	420	839	899	2860	2720	880	509	585
MIN	355	412	320	280	330	431	502	882	799	337	342	300
AC-FT	24870	27790	25230	20460	22040	32950	42100	95260	94630	31130	23510	23930

CAL YR 1987 TOTAL 251906 MEAN 690 MAX 2520 MIN 320 AC-FT 499700
WTR YR 1988 TOTAL 233885 MEAN 639 MAX 2860 MIN 280 AC-FT 463900

09306224 WHITE RIVER ABOVE CROOKED WASH NEAR WHITE RIVER CITY, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1982 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
NOV									
20...	1500	440	750	8.5	0.0	12.7	330	83	30
MAY									
17...	1100	2360	300	8.1	12.5	7.8	140	41	10
JUN									
23...	1500	1110	440	8.3	20.5	8.1	200	52	16
AUG									
26...	1435	386	750	8.5	20.0	8.8	310	72	31

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
NOV									
20...	41	1	1.6	184	190	14	0.3	15	486
MAY									
17...	9.0	0.3	1.0	106	52	2.2	0.2	13	193
JUN									
23...	17	0.5	1.3	136	81	5.4	0.3	15	270
AUG									
26...	44	1	1.6	205	190	11	0.3	12	485

DATE	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P)	PHOS-PHOROUS ORTHO, DIS-SOLVED (MG/L AS P)
NOV								
20...	0.66	578	<0.01	0.24	0.01	<0.2	<0.01	<0.01
MAY								
17...	0.26	1230	<0.01	0.17	0.04	<0.2	0.05	0.01
JUN								
23...	0.37	808	<0.01	<0.1	0.04	<0.2	0.05	0.03
AUG								
26...	0.66	505	<0.01	<0.1	0.01	0.60	0.02	<0.01

DATE	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ANTI-MONY, TOTAL (UG/L AS SB)	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)
NOV										
20...	660	<1	1	<100	<10	<1	2	<1	3	820
MAY										
17...	7200	<1	2	<100	<10	<1	9	6	7	8100

DATE	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LITHIUM TOTAL RECOV-ERABLE (UG/L AS LI)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)
NOV										
20...	<5	20	50	<0.1	2	3	2	<1	990	<10
MAY										
17...	5	20	260	<0.1	5	12	<1	1	420	40

09306224 WHITE RIVER ABOVE CROOKED WASH NEAR WHITE RIVER CITY, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	TUR-BID-ITY (FTU)	OXYGEN, DIS-SOLVED (MG/L)
OCT							
06...	1415	359	755	--	13.0	--	--
NOV							
18...	1430	435	--	--	0.0	--	--
MAR							
15...	1345	461	880	--	3.0	--	--
28...	1430	838	790	8.2	3.5	310	10.0
APR							
20...	1025	934	588	--	8.5	--	--
MAY							
05...	1415	942	530	8.3	12.0	38	--
10...	1330	915	534	--	12.0	--	--
12...	1640	1180	440	8.0	15.5	70	--
20...	1740	2260	356	--	11.0	--	--
27...	1410	1760	355	8.0	13.0	43	--
JUN							
02...	1435	1280	400	--	--	19	--
10...	1345	2690	298	8.0	14.5	42	--
13...	1200	2210	334	--	14.5	--	--
28...	1220	798	530	8.2	19.5	9.0	--
JUL							
01...	1430	716	580	8.3	20.5	9.7	--
08...	1400	583	610	8.4	21.0	13	--
28...	1310	383	679	--	21.5	--	--
29...	1430	381	695	--	22.0	--	--
AUG							
16...	1435	369	785	--	21.0	--	--
SEP							
16...	1440	404	725	--	15.5	--	--

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
NOV					
20...	1500	440	115	137	50
MAR					
28...	1430	838	1510	3420	88
MAY					
05...	1415	942	249	633	51
12...	1640	1180	880	2800	38
27...	1410	1760	296	1410	51
JUN					
10...	1345	2690	289	2100	55
23...	1500	1110	93	279	57
28...	1220	798	47	101	73
JUL					
01...	1430	716	41	79	64
08...	1400	583	69	109	54
29...	1430	381	103	106	76
AUG					
26...	1435	386	21	22	79

09306224 WHITE RIVER ABOVE CROOKED WASH NEAR WHITE RIVER CITY, CO--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP FALL DIAM. % FINER THAN .008 MM
MAY							
17...	1100	2360	1020	6500	16	21	27
20...	1740	2260	251	1530	--	--	--
JUN							
02...	1435	1280	84	290	--	--	--

DATE	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. FALL DIAM. % FINER THAN .250 MM	SED. SUSP. FALL DIAM. % FINER THAN .500 MM	SED. SUSP. FALL DIAM. % FINER THAN 1.00 MM
MAY						
17...	33	65	84	96	100	--
20...	--	67	82	98	100	--
JUN						
02...	--	67	80	89	98	100

09306235 CORRAL GULCH BELOW WATER GULCH, NEAR RANGELY, CO

LOCATION.--Lat 39°54'22", long 108°31'56", in SE¼NW¼ sec.5, T.2 S., R.99 W., Rio Blanco County, Hydrologic Unit 14050006, on left bank 0.1 mi downstream from Water Gulch and 19 mi southeast of Rangely.

DRAINAGE AREA.--8.61 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1974 to current year.

GAGE.--Water-stage recorder. Concrete control since Aug. 1, 1974. Prior to Aug. 1, 1974, water-stage recorder at different datum. Elevation of gage is 6,975 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 15-17, Dec. 26 to Jan. 13, Jan. 15 to Feb. 28, Apr. 12-14, and Apr. 30 to May 9. Records good except those above 28 ft³/s, which are fair, and estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--14 years, 1.04 ft³/s; 753 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge determined, 272 ft³/s, July 23, 1977, gage height, 3.20 ft, maximum gage height, 13.50 ft, May 31, 1983 (from mud flow); no flow many days most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 12 ft³/s at 2045 Aug. 3, gage height, 1.80 ft; minimum daily, 0.28 ft³/s, Dec. 21.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.0	.66	.53	.38	.37	.41	.48	1.7	1.3	.64	.71	.51
2	.98	.66	.46	.38	.35	.38	.65	1.7	1.2	.63	.67	.53
3	.99	.66	.46	.36	.34	.38	.95	1.7	1.2	.69	1.0	.54
4	.90	.66	.46	.36	.32	.40	.70	1.8	1.2	.72	.76	.53
5	.89	.67	.45	.36	.30	.45	.65	1.8	1.2	.68	.72	.53
6	.84	.70	.42	.36	.31	.42	.73	1.8	1.1	.64	.72	.53
7	.84	.65	.43	.36	.34	.43	.72	1.8	1.1	.65	.63	.52
8	.82	.60	.51	.36	.35	.45	.65	1.8	1.1	.66	.66	.52
9	.77	.60	.53	.36	.37	.43	.60	1.9	1.1	.68	.64	.51
10	.77	.60	.45	.36	.37	.48	.59	2.0	1.0	.70	.58	.51
11	.77	.60	.43	.36	.37	.53	.55	2.1	1.0	.68	.58	.55
12	.77	.60	.47	.35	.37	.46	.55	2.0	1.0	.67	.56	.56
13	.77	.60	.50	.35	.36	.46	.59	2.0	1.1	.63	.58	.53
14	.77	.60	.49	.35	.36	.46	.55	2.0	1.0	.62	.56	.51
15	.77	.58	.44	.35	.36	.45	.56	2.0	.94	.67	.61	.51
16	.77	.56	.33	.35	.36	.42	.55	1.9	.86	.66	.59	.50
17	.76	.54	.31	.35	.36	.42	.59	2.1	.86	.65	.59	.50
18	.71	.63	.31	.35	.36	.42	.64	2.1	.80	.64	.54	.49
19	.71	.50	.31	.34	.36	.42	.79	1.9	.80	.64	.53	.50
20	.71	.46	.30	.33	.36	.40	.84	1.8	.78	.63	.54	.50
21	.71	.46	.28	.31	.39	.45	1.0	1.7	.77	.65	.55	.51
22	.71	.46	.33	.31	.40	.48	1.2	1.5	.75	.68	.54	.52
23	.71	.47	.42	.33	.39	.53	1.2	1.5	.74	.69	.54	.50
24	.71	.51	.42	.34	.34	.46	1.2	1.5	.73	.69	.53	.49
25	.71	.51	.42	.34	.34	.71	1.3	1.5	.72	.70	.54	.48
26	.71	.51	.40	.34	.35	1.0	1.3	1.5	.76	.71	.51	.48
27	.70	.51	.40	.34	.36	1.2	1.4	1.5	.73	.72	.49	.47
28	.66	.50	.40	.34	.38	.69	1.6	1.5	.74	.73	.48	.46
29	.66	.47	.40	.34	.42	.62	1.7	1.5	.74	.69	.48	.46
30	.66	.55	.40	.34	---	.65	1.7	1.4	.68	.70	.51	.46
31	.66	---	.40	.34	---	.54	---	1.4	---	.70	.51	---
TOTAL	23.82	17.08	12.86	10.79	10.41	16.00	26.53	54.4	28.00	20.84	18.50	15.21
MEAN	.77	.57	.41	.35	.36	.52	.88	1.75	.93	.67	.60	.51
MAX	1.0	.70	.53	.38	.42	1.2	1.7	2.1	1.3	.73	1.0	.56
MIN	.66	.46	.28	.31	.30	.38	.48	1.4	.68	.62	.48	.46
AC-FT	47	34	26	21	21	32	53	108	56	41	37	30

CAL YR 1987 TOTAL 437.60 MEAN 1.20 MAX 5.1 MIN .16 AC-FT 868
WTR YR 1988 TOTAL 254.44 MEAN .70 MAX 2.1 MIN .28 AC-FT 505

09306235 CORRAL GULCH BELOW WATER GULCH, NEAR RANGELY, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--March 1974 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1974 to September 1985.
WATER TEMPERATURE: April 1974 to September 1985.
SUSPENDED-SEDIMENT DISCHARGE: October 1974 to September 1982.

INSTRUMENTATION.--Water-quality monitor April 1974 to September 1985. Pumping sediment sampler October 1974 to September 1982.

REMARKS.--Unpublished maximum and minimum specific conductance data for period of daily record available in district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 6,490 microsiemens Dec. 19, 1981; minimum, 230 microsiemens Mar. 20, 1978.
WATER TEMPERATURES: Maximum, 33.5°C June 11, 1981; minimum, freezing point many days during winter months each year.
SEDIMENT CONCENTRATIONS: Maximum daily, 17,800 mg/L July 26, 1981; no flow many days during 1974-78, 1981.
SEDIMENT LOADS: Maximum daily, 162 tons May 20, 1979; no flow many days during 1974-78, Dec. 15, 1979, 1981.

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
JUN										
30...	1100	0.71	1380	8.3	18.0	7.6	580	110	73	110

DATE	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
JUN									
30...	2	1.1	268	440	15	0.3	21	994	950

DATE	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)
JUN									
30...	1.35	1.91	<0.01	3.80	0.01	0.90	<0.01	2100	11

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
OCT					APR				
07...	1250	0.86	1570	15.0	01...	1200	0.65	1350	7.0
NOV					12...	1215	0.55	1380	16.0
18...	1100	0.55	1580	0.5	MAY				
JAN					10...	1115	2.0	1350	14.0
07...	1050	0.35	1430	0.0	JUN				
FEB					01...	1118	1.3	1360	14.0
23...	1110	0.55	1450	6.5	AUG				
					30...	1114	0.52	1440	19.5

09306242 CORRAL GULCH NEAR RANGELY, CO

LOCATION.--Lat 39°55' 3", long 108°28'20", in SE¼NW¼ sec.35, T.1 S., R.99 W., Rio Blanco County, Hydrologic Unit 14050006, on left bank 5 ft downstream from Boxelder Creek, and 3.5 mi upstream from confluence with Stake Springs Draw, and 21 mi southeast of Rangely.

DRAINAGE AREA.--31.6 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1974 to current year.

GAGE.--Water-stage recorder. Concrete control since July 20, 1974. Elevation of gage is 6,570 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records good. No diversions upstream from station.

AVERAGE DISCHARGE.--14 years, 2.78 ft³/s; 2,010 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,780 ft³/s, Aug. 18, 1984, gage height, 6.12 ft, from rating curve extended above 70 ft³/s, on basis of slope-area measurements at gage heights 3.89 ft, 4.93 ft, and 6.12 ft; minimum daily, 0.06 ft³/s, Apr. 10-14, 1974.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 17 ft³/s at 2245 Aug. 5, gage height, 2.74 ft; minimum daily, 0.95 ft³/s, Mar. 24.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.8	1.9	1.5	1.2	1.3	[illegible]	1.1	[illegible]	[illegible]	[illegible]	[illegible]	1.4
2	1.9	1.8	1.5	[illegible]	1.2	1.4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.4
3	1.9	1.8	1.5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
4	1.9	1.8	1.5	[illegible]	1.1	[illegible]	1.3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
5	2.0	1.8	1.5	[illegible]	1.1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
6	2.1	1.8	1.5	1.2	[illegible]	1.2	1.3	[illegible]	[illegible]	[illegible]	[illegible]	1.4
7	2.2	1.9	1.4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.4
8	2.0	1.8	1.4	[illegible]	1.2	1.1	1.4	[illegible]	2.6	[illegible]	[illegible]	1.4
9	2.0	1.7	1.4	[illegible]	[illegible]	1.2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.4
10	2.0	1.8	1.5	1.2	1.3	[illegible]	[illegible]	[illegible]	[illegible]	1.7	[illegible]	1.4
11	1.9	1.7	1.5	[illegible]	1.3	1.1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.6
12	2.0	1.7	1.4	1.1	1.2	1.1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.7
13	2.1	1.7	1.3	1.1	1.2	1.1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.6
14	2.1	1.8	1.2	1.1	1.2	1.1	[illegible]	[illegible]	[illegible]	[illegible]	1.7	1.5
15	2.0	1.6	1.2	[illegible]	1.3	1.1	[illegible]	[illegible]	[illegible]	[illegible]	1.9	1.5
16	1.9	1.5	1.2	[illegible]	1.3	1.1	[illegible]	[illegible]	[illegible]	[illegible]	1.8	[illegible]
17	1.9	1.5	1.2	[illegible]	1.3	1.1	[illegible]	[illegible]	[illegible]	[illegible]	1.8	1.5
18	1.9	1.5	1.2	[illegible]	[illegible]	1.1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.4
19	1.9	1.5	1.2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.8	1.4
20	1.9	1.6	1.2	1.1	1.3	1.9	1.6	[illegible]	[illegible]	[illegible]	1.8	1.3
21	1.9	1.6	1.3	1.1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.9	1.4
22	1.9	1.6	1.3	1.1	1.3	1.3	1.9	[illegible]	[illegible]	[illegible]	1.8	1.3
23	1.9	1.6	1.3	1.1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.7	1.3
24	1.9	1.5	1.3	1.2	[illegible]	.95	[illegible]	[illegible]	[illegible]	[illegible]	1.7	[illegible]
25	1.8	1.5	1.2	1.2	1.2	1.2	[illegible]	[illegible]	[illegible]	1.3	1.7	1.2
26	1.8	1.6	1.3	1.2	[illegible]	1.3	1.6	[illegible]	[illegible]	[illegible]	1.7	1.2
27	1.8	1.5	1.2	1.2	1.3	1.7	1.9	[illegible]	[illegible]	1.4	1.8	1.2
28	1.8	1.6	1.2	1.2	1.4	1.1	2.0	[illegible]	2.6	[illegible]	[illegible]	1.2
29	1.8	1.5	1.2	1.2	1.5	1.1	2.2	[illegible]	[illegible]	1.5	1.7	[illegible]
30	1.8	1.5	1.2	1.2	---	1.2	2.2	5.1	[illegible]	1.6	1.6	1.1
31	1.8	---	1.2	1.3	---	1.1	---	5.1	---	1.6	1.6	---
TOTAL	59.6	49.6	41.1	36.3	36.1	39.15	45.9	163.7	98.8	46.6	58.2	41.4
MEAN	1.92	1.65	1.33	1.17	1.24	1.26	1.53	5.28	3.39	1.50	1.88	1.38
MAX	2.2	1.9	1.5	1.3	1.5	2.2	2.2	6.5	4.7	2.1	2.7	1.7
MIN	1.8	1.5	1.2	1.1	1.1	.95	1.1	2.4	2.2	1.3	1.6	1.1
AC-FT	118	98	82	72	72	78	91	325	194	92	115	82

CAL YR 1987 TOTAL 1229.73 MEAN 3.37 MAX 18 MIN .82 AC-FT 2440
WTR YR 1988 TOTAL 710.45 MEAN 1.94 MAX 6.5 MIN .95 AC-FT 1410

09306242 CORRAL GULCH NEAR RANGELY, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--March 1974 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1975 to current year.
WATER TEMPERATURE: January 1975 to current year.
SUSPENDED-SEDIMENT DISCHARGE: October 1974 to September 1985.

INSTRUMENTATION.--Water-quality monitor since October 1974. Pumping sediment sampler October 1974 to September 1985.

REMARKS.--Unpublished maximum and minimum specific conductance data for period of daily record available in district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, [illegible] microsiemens July [illegible], 197[illegible]; minimum, 371 microsiemens Feb. 18, 1980.
WATER TEMPERATURES: Maximum, 29.[illegible]°C Aug. 5, 1979; minimum, 0.0°C on several days during winter months some years.
SEDIMENT CONCENTRATIONS: Maximum daily, [illegible] mg/L Aug. 2, 1983; minimum daily, 2 mg/L May 24, [illegible].
SEDIMENT LOADS: Maximum daily, [illegible] tons August [illegible], 19[illegible]; minimum daily, 0.00 ton on many days during [illegible].

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, [illegible] microsiemens Feb. [illegible] and Mar. [illegible]; minimum, [illegible] microsiemens Mar. [illegible].
WATER TEMPERATURES: Maximum, [illegible]°C Aug. [illegible]; minimum, [illegible]°C May [illegible].

WATER-QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (US/CM)	PH (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARDNESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNESIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
JUN										
30...	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

DATE	SODIUM AD-SORP-TION RATIO	POTASSIUM, DIS-SOLVED (MG/L AS K)	ALKALINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)
JUN									
30...	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.2[illegible]	19	974	959

DATE	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)
JUN									
30...	1.32	6.31	<0.010	2.10	0.010	0.80	0.010	2200	8.9

09306242 CORRAL GULCH NEAR RANGELY, CO--Continued

SPECIFIC CONDUCTANCE MICROSIEMENS/CM AT 25 DEG. C, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1630	1660	1700	1740	1690	1460	1630	---	[illegible]	[illegible]	[illegible]	[illegible]
2	1590	1640	1690	1710	1700	1580	1630	---	[illegible]	[illegible]	[illegible]	[illegible]
3	1600	1660	1700	1710	1630	1640	1470	---	1430	[illegible]	[illegible]	[illegible]
4	1610	1660	1690	1690	1670	1720	1460	---	[illegible]	[illegible]	[illegible]	[illegible]
5	1610	1660	1670	1670	1680	1730	[illegible]	---	[illegible]	[illegible]	[illegible]	[illegible]
6	1610	1660	1680	1630	1680	1640	[illegible]	---	[illegible]	[illegible]	[illegible]	[illegible]
7	1620	1660	1670	1670	1680	1670	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
8	1630	1660	1690	1700	1680	1700	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
9	[illegible]	1620	1690	1730	1670	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
10	1640	1660	1680	1630	1680	1730	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
11	[illegible]	1660	1680	1670	1690	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
12	[illegible]	1650	1690	1710	1710	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
13	1650	1670	1710	1730	1690	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
14	[illegible]	1640	1730	1720	1730	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
15	[illegible]	1670	1710	1690	1630	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
16	[illegible]	[illegible]	1650	1690	1640	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
17	1650	1700	1670	1670	1710	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
18	[illegible]	1710	[illegible]	1650	1710	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
19	1640	[illegible]	1660	1720	1720	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
20	1650	[illegible]	1670	1710	1690	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
21	1660	[illegible]	[illegible]	1690	1630	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
22	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1640	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
23	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
24	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
25	1660	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
26	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
27	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
28	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
29	1660	1700	[illegible]	[illegible]	[illegible]	[illegible]	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
30	[illegible]	[illegible]	[illegible]	[illegible]	---	[illegible]	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
31	[illegible]	---	[illegible]	[illegible]	---	[illegible]	---	[illegible]	---	[illegible]	[illegible]	---
MEAN	1640	[illegible]	1700	[illegible]	1640	[illegible]	---	---	[illegible]	[illegible]	[illegible]	[illegible]

WTR YR 1983 MEAN [illegible] MAX 1740 MIN [illegible]

09306242 CORRAL GULCH NEAR RANGELY, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	[illegible]	[illegible]	11.0	6.7	6.7	3.5	4.5	1.5	6.7	2.5	11.4	2.6
2	[illegible]	4.6	11.2	6.5	7.2	3.7	5.0	1.9	6.7	2.9	6.9	3.8
3	[illegible]	4.7	[illegible]	6.0	7.7	4.0	5.5	1.5	6.8	2.1	10.4	3.7
4	[illegible]	[illegible]	10.7	4.9	8.1	4.2	5.1	2.9	6.6	2.3	9.3	2.6
5	[illegible]	[illegible]	[illegible]	4.6	6.9	5.1	6.0	3.7	7.0	2.3	10.0	1.9
6	[illegible]	[illegible]	[illegible]	5.4	8.2	4.6	5.9	4.1	7.4	2.7	10.0	1.7
7	[illegible]	[illegible]	5.6	4.7	7.7	4.7	5.9	2.8	7.3	2.7	6.5	1.6
8	[illegible]	[illegible]	9.3	4.5	6.5	3.5	5.9	1.9	6.2	2.4	9.7	1.3
9	[illegible]	[illegible]	[illegible]	[illegible]	6.9	[illegible]	[illegible]	2.0	7.3	2.2	10.9	2.0
10	[illegible]	[illegible]	[illegible]	3.9	7.3	[illegible]	5.7	3.0	7.5	2.4	8.4	1.8
11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2.3	7.4	2.5	7.4	1.5
12	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.3	8.3	2.0	8.8	1.0
13	[illegible]	[illegible]	[illegible]	[illegible]	5.1	[illegible]	[illegible]	1.2	7.4	1.7	8.3	1.0
14	[illegible]	[illegible]	[illegible]	[illegible]	5.5	[illegible]	5.3	1.0	7.3	1.4	8.9	.9
15	[illegible]	[illegible]	[illegible]	[illegible]	5.7	[illegible]	5.7	2.3	7.8	2.4	9.2	2.3
16	[illegible]	[illegible]	[illegible]	[illegible]	6.1	3.4	6.3	[illegible]	7.2	1.4	6.0	1.3
17	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	3.1	7.2	1.3	8.4	.9
18	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	6.5	1.1	10.2	1.1
19	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	7.4	1.0	12.5	1.3
20	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.5	8.0	1.6	12.3	2.1
21	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	8.4	1.6	12.5	[illegible]
22	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	10.7	4.0
23	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.7	10.6	4.0
24	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.1	[illegible]	3.3
25	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2.1	9.4	1.0	12.4	3.5
26	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.8	14.5	2.5
27	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.6	14.9	1.7
28	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	9.4	3.1	6.9	2.1
29	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	11.3	2.8	8.6	2.8
30	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	---	---	4.5	1.6
31	[illegible]	[illegible]	---	---	[illegible]	[illegible]	[illegible]	[illegible]	---	---	10.8	3.2
MONTH	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.7	8.4	1.0	11.3	1.0	14.9	.9

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	8.7	19.7	7.1
2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	8.6	19.1	6.8
3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	21.9	10.6	18.7	6.0
4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	24.7	10.1	19.3	5.8
5	[illegible]	[illegible]	[illegible]	[illegible]	23.6	[illegible]	[illegible]	[illegible]	25.1	7.1	19.1	4.8
6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	7.0	[illegible]	[illegible]	24.6	11.5	18.0	5.5
7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	4.3	[illegible]	7.8	24.0	8.8	17.5	6.6
8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	4.4	[illegible]	8.1	21.8	7.3	18.3	5.0
9	[illegible]	[illegible]	[illegible]	[illegible]	22.2	[illegible]	[illegible]	7.5	23.0	6.7	18.7	5.2
10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	7.1	23.3	6.9	16.3	8.7
11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	6.9	22.4	[illegible]	21.4	7.1	10.9	7.6
12	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	3.7	21.5	9.4	9.5	7.1
13	[illegible]	[illegible]	[illegible]	[illegible]	17.7	8.4	22.2	7.3	22.6	6.8	16.6	5.3
14	[illegible]	3.7	[illegible]	[illegible]	[illegible]	5.3	21.0	8.9	21.9	6.9	14.3	4.2
15	[illegible]	1.5	21.8	4.0	21.8	6.3	18.6	7.6	19.8	9.1	17.2	3.5
16	[illegible]	3.5	[illegible]	5.0	23.0	6.7	20.2	8.0	24.0	9.9	17.5	3.9
17	[illegible]	4.1	15.3	7.7	21.1	7.2	20.8	7.9	21.2	10.4	16.5	4.4
18	[illegible]	.4	15.1	5.6	21.1	6.6	21.1	7.3	22.4	7.6	13.7	3.6
19	[illegible]	[illegible]	12.1	5.9	21.4	7.9	20.3	7.3	23.0	7.6	15.5	3.3
20	[illegible]	[illegible]	16.8	4.4	22.1	8.5	20.7	6.5	19.4	8.7	16.1	3.1
21	[illegible]	2.3	19.1	2.6	22.9	9.1	21.1	6.6	20.7	11.4	14.7	5.4
22	[illegible]	[illegible]	21.1	3.3	22.5	8.5	21.1	7.2	22.3	9.4	15.3	5.6
23	[illegible]	[illegible]	21.5	3.3	21.9	8.4	19.4	9.3	23.1	7.5	17.1	3.9
24	[illegible]	3.3	21.0	4.0	23.1	9.2	21.2	7.7	23.0	7.9	16.4	4.3
25	[illegible]	[illegible]	16.3	5.7	23.4	9.1	20.5	8.2	22.0	8.3	15.6	4.1
26	10.7	1.9	16.7	5.4	20.9	9.4	18.0	8.9	20.7	8.7	14.4	4.1
27	[illegible]	[illegible]	19.5	6.2	22.1	9.7	19.9	8.2	20.6	7.7	15.9	4.3
28	[illegible]	[illegible]	21.4	4.4	18.1	11.0	18.9	9.9	19.6	7.5	13.0	3.6
29	[illegible]	5.2	17.1	5.1	19.7	9.2	21.2	8.5	18.9	7.1	14.4	3.6
30	15.2	5.2	16.4	5.1	23.1	7.6	20.9	8.4	20.6	7.8	15.5	3.4
31	---	---	16.5	3.1	---	---	20.8	10.5	19.0	7.5	---	---
MONTH	19.9	1.9	21.8	.4	24.9	2.7	22.4	6.5	25.1	6.7	19.7	3.1

YEAR MAXIMUM 25.1 MINIMUM 0.4 MEAN 8.2

GREEN RIVER BASIN

09306255 YELLOW CREEK NEAR WHITE RIVER, CO

LOCATION.--Lat 40°10'07", long 108°24'32", in NE¼SW¼ sec.4, T.2 N., R.98 W., Rio Blanco County, Hydrologic Unit 14050006, on left bank 150 ft downstream from bridge on State Highway 64, 1.3 mi upstream from mouth, and 10.0 mi northwest of White River City.

WATER-DISCHARGE RECORDS

DRAINAGE AREA.--262 mi².

PERIOD OF RECORD.--October 1972 to September 1982, May to September 1988.

GAGE.--Water-stage recorder. Elevation of gage is 5,535 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: May 1-11. Records fair except for estimated daily discharges and flows above 20 ft³/s, which are poor. Diversions upstream from station for irrigation of about 300 acres.

AVERAGE DISCHARGE.--10 years (water years 1973-82), 1.9 ft³/s; 1,380 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,300 ft³/s, Sept. 7, 1978, gage height, 10.97 ft, on basis of contracted opening and flow over road measurement of peak flow; minimum daily, no flow Sept. 7-14, 1978, Dec. 15, 1978 to Jan. 14, 1979.

EXTREMES FOR CURRENT YEAR (MAY TO SEPTEMBER).--Peak discharges greater than base discharge of 100 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Aug. 7	1600	*144	*6.59				

Minimum daily discharge, 4.3 ft³/s, Sept. 9.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	11	[illegible]	[illegible]	[illegible]	[illegible]
2	---	---	---	---	---	---	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
3	---	---	---	---	---	---	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
4	---	---	---	---	---	---	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
5	---	---	---	---	---	---	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
6	---	---	---	---	---	---	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7	---	---	---	---	---	---	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
8	---	---	---	---	---	---	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
9	---	---	---	---	---	---	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
10	---	---	---	---	---	---	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
11	---	---	---	---	---	---	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
12	---	---	---	---	---	---	---	[illegible]	[illegible]	[illegible]	[illegible]	4.9
13	---	---	---	---	---	---	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
14	---	---	---	---	---	---	---	[illegible]	[illegible]	[illegible]	[illegible]	4.8
15	---	---	---	---	---	---	---	[illegible]	7.3	[illegible]	[illegible]	[illegible]
16	---	---	---	---	---	---	---	[illegible]	6.7	[illegible]	6.7	4.9
17	---	---	---	---	---	---	---	[illegible]	6.9	5.9	[illegible]	[illegible]
18	---	---	---	---	---	---	---	21	[illegible]	[illegible]	[illegible]	[illegible]
19	---	---	---	---	---	---	---	18	6.3	[illegible]	[illegible]	[illegible]
20	---	---	---	---	---	---	---	17	[illegible]	[illegible]	[illegible]	[illegible]
21	---	---	---	---	---	---	---	17	[illegible]	[illegible]	[illegible]	[illegible]
22	---	---	---	---	---	---	---	[illegible]	6.6	[illegible]	[illegible]	[illegible]
23	---	---	---	---	---	---	---	11	[illegible]	[illegible]	[illegible]	[illegible]
24	---	---	---	---	---	---	---	13	[illegible]	[illegible]	[illegible]	[illegible]
25	---	---	---	---	---	---	---	9.8	6.4	[illegible]	[illegible]	[illegible]
26	---	---	---	---	---	---	---	11	6.6	[illegible]	[illegible]	[illegible]
27	---	---	---	---	---	---	---	10	6.8	[illegible]	[illegible]	[illegible]
28	---	---	---	---	---	---	---	9.6	6.9	[illegible]	[illegible]	5.5
29	---	---	---	---	---	---	---	9.3	7.3	[illegible]	[illegible]	5.7
30	---	---	---	---	---	---	---	10	6.6	5.1	[illegible]	5.7
31	---	---	---	---	---	---	---	7.6	---	4.9	5.3	---
TOTAL	---	---	---	---	---	---	---	402.9	207.3	175.1	191.3	149.6
MEAN	---	---	---	---	---	---	---	13.0	6.91	5.65	6.16	4.99
MAX	---	---	---	---	---	---	---	21	8.6	6.4	13	5.7
MIN	---	---	---	---	---	---	---	7.6	6.4	4.9	4.3	4.3
AC-FT	---	---	---	---	---	---	---	799	411	347	379	297

[illegible] YELLOW CREEK NEAR WHITE RIVER, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1974 to September 1982, March 1983 to September 1988.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1975 to September 1982.
WATER TEMPERATURES: April 1975 to September 1982.
SUSPENDED-SEDIMENT DISCHARGE: April 1974 to September 1982.

INSTRUMENTATION.--Automatic pumping sediment sampler April 1974 to September 1982. Water-quality monitor April 1975 to September 1982.

REMARKS.--Daily maximum and minimum specific conductance data for the period of daily record are available in the district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum [illegible] microsiemens Sept. [illegible], 1978; minimum, 417 microsiemens July 31, 1979.
WATER TEMPERATURES: Maximum [illegible]°C July [illegible], 1975; minimum, 0.0°C on many days during the winter period.
SEDIMENT CONCENTRATIONS: Maximum daily, 24,[illegible] mg/L Sept. 27, 1978; minimum daily, no flow several days during September 1975, many days during 1977.
SEDIMENT LOADS: Maximum daily, [illegible] tons Sept. 27, 1978; minimum daily, no flow several days during September 1975, many days during 1977.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	970	93	[illegible]	450
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	9.7	[illegible]	76	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	9.5	[illegible]	80	[illegible]	590
[illegible]	[illegible]	[illegible]	--	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

DATE	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)
[illegible]	[illegible]	3.2	[illegible]	[illegible]	[illegible]	0.8	17	[illegible]	3.14
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	60	0.9	17	2470	3.35
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.7	14	[illegible]	3.16
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	66	0.9	[illegible]	[illegible]	3.22

DATE	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)	BORON, DIS-SOLVED (UG/L AS B)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)
[illegible]	[illegible]	<0.01	[illegible]	0.36	1.0	0.06	0.05	420	5500
[illegible]	[illegible]	[illegible]	0.50	<0.01	0.60	0.03	<0.01	440	4900
[illegible]	[illegible]	[illegible]	0.70	0.01	0.70	0.02	0.01	430	4800
[illegible]	53.5	[illegible]	0.70	0.02	0.70	0.01	<0.01	440	4000

09306255 YELLOW CREEK NEAR WHITE RIVER, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
FEB 29...	1230	17	2450	6.0
APR 20...	1155	11	3210	13.0
MAY 11...	1430	13	3010	21.0
JUN 14...	1040	7.7	3140	15.5
JUL 22...	1445	5.6	3080	27.5
AUG 16...	1310	6.8	3130	26.0
SEP 16...	1300	5.4	3240	17.0

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
MAR 15...	1030	11	708	21	38
JUN 29...	1500	6.9	152	2.8	--
JUL 28...	1100	5.6	89	1.3	--
SEP 02...	1350	4.5	545	6.6	82

[illegible] WHITE RIVER BELOW BOISE CREEK, NEAR RANGELY, CO

LOCATION.--Lat [illegible], long [illegible], in SW¼SE¼ sec.36, T.3 N., R.100 W., Rio Blanco County, Hydrologic Unit [illegible], on left bank [illegible] ft downstream from bridge on County Road 73, 0.5 mi below Boise Creek, and 16.4 mi [illegible] of Rangely.

WATER-DISCHARGE RECORDS

DRAINAGE AREA.--[illegible] mi².

PERIOD OF RECORD.--August [illegible] to current year.

GAGE.--Water-stage recorder. Elevation of gage is 5,[illegible] ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Dec. [illegible] to Mar. [illegible], Mar. [illegible] to Apr. 2, May 22 to June 2, June 10-13, July [illegible], and Sept. [illegible]. Records good except for estimated daily discharges, which are poor. Diversions upstream from station for irrigation of about [illegible] acres.

AVERAGE DISCHARGE.--[illegible] years, [illegible] ft³/s; [illegible] acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,440 ft³/s, June 7, 1984, gage height, 8.45 ft; minimum daily, [illegible] ft³/s, Sept. [illegible], [illegible].

EXTREMES FOR CURRENT YEAR.--Maximum discharge, [illegible],540 ft³/s at 1700 May 19, gage height, 5.95 ft; minimum daily, 218 ft³/s, Sept. [illegible].

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	[illegible]	[illegible]	[illegible]	[illegible]	390	470	640	1020	1600	900	390	339
2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	480	640	1100	1400	855	410	327
3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	480	655	935	1690	815	399	333
4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	480	737	934	1900	801	546	320
5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	470	700	897	2130	983	487	307
6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	500	[illegible]	995	2540	812	411	272
7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1000	[illegible]	750	452	254
8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	974	2480	[illegible]	435	220
9	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	757	[illegible]	2370	649	392	218
10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	647	358	250
11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	440	591	962	[illegible]	[illegible]	346	[illegible]
12	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	450	[illegible]	1170	2200	643	335	560
13	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1490	2000	611	365	700
14	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	757	[illegible]	1970	618	373	700
15	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	390	1030	2110	1760	554	345	540
16	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	998	2140	1670	521	362	480
17	[illegible]	[illegible]	[illegible]	[illegible]	390	370	1340	2220	1600	555	352	470
18	[illegible]	[illegible]	[illegible]	[illegible]	390	370	1430	2680	1510	540	334	460
19	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	500	1150	2740	1440	520	340	450
20	[illegible]	[illegible]	[illegible]	[illegible]	390	700	976	2460	1400	520	331	430
21	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	930	967	2070	1320	520	364	419
22	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1000	975	1700	1240	490	411	457
23	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	914	1600	1200	405	424	486
24	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	882	886	1650	1150	322	420	475
25	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	727	861	1850	1060	284	400	465
26	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	833	1900	991	287	380	459
27	[illegible]	[illegible]	[illegible]	[illegible]	430	833	808	1900	990	318	463	478
28	[illegible]	[illegible]	[illegible]	[illegible]	450	1000	788	2100	974	354	434	458
29	[illegible]	[illegible]	[illegible]	[illegible]	460	800	810	2300	1120	363	389	460
30	[illegible]	[illegible]	[illegible]	[illegible]	---	700	866	2300	1020	365	363	472
31	[illegible]	---	[illegible]	[illegible]	---	640	---	2000	---	360	346	---
TOTAL	[illegible]	[illegible]	[illegible]	[illegible]	11480	18313	25316	50975	49845	17763	12168	12659
MEAN	[illegible]	[illegible]	[illegible]	344	396	591	844	1644	1661	573	393	422
MAX	[illegible]	[illegible]	[illegible]	390	460	1000	1430	2740	2540	983	546	700
MIN	[illegible]	[illegible]	[illegible]	[illegible]	330	370	591	897	974	284	331	218
AC-FT	[illegible]	[illegible]	[illegible]	21120	22770	36320	50210	101100	98870	35230	24140	25110

CAL YR 1987 TOTAL [illegible] MEAN 702 MAX 2260 MIN 305 AC-FT 508200
WTR YR 1988 TOTAL 253149 MEAN 692 MAX 2740 MIN 218 AC-FT 502100

09306290 WHITE RIVER BELOW BOISE CREEK NEAR RANGELY, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1982 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
NOV 20...	1600	598	810	8.6	0.0	12.4	340	80	34	58
MAY 17...	1230	2260	380	8.1	13.0	7.8	160	44	13	17
JUN 23...	1545	1210	465	8.3	22.0	7.8	200	52	17	22
AUG 26...	1530	381	800	8.5	22.5	9.2	300	65	34	57

DATE	SODIUM AD-SORP-TION RATIO	POT'S-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)
NOV 20...	1	1.6	200	210	15	0.3	15	536	0.73	866
MAY 17...	0.6	1.1	116	76	3.3	0.2	12	238	0.32	1450
JUN 23...	0.7	1.3	143	90	6.2	0.3	14	289	0.39	943
AUG 26...	1	1.6	192	210	13	0.3	11	507	0.69	522

DATE	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P)	PHOS-PHOROUS ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHOROUS HYDRO. + ORTHO DIS. (MG/L AS P)	BORON, DIS-SOLVED (UG/L AS B)	IRON, DIS-SOLVED (UG/L AS FE)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)
NOV 20...	<0.01	0.30	0.01	<0.2	<0.01	<0.01	0.05	60	47	2.2
MAY 17...	<0.01	0.25	0.04	0.20	0.05	0.02	0.04	20	120	4.4
JUN 23...	<0.01	<0.1	0.01	0.50	0.03	0.03	0.02	30	30	3.4
AUG 26...	<0.01	<0.1	0.01	0.50	0.02	<0.01	<0.01	60	30	3.4

DATE	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHOROUS TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ANTI-MONY, DIS-SOLVED (UG/L AS SB)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)
NOV 20...	0.30	0.02	0.38	0.40	0.01	--	940	20	<1	1	1
MAY 17...	0.20	0.03	0.57	0.60	0.06	0.03	7900	110	4	1	1

09306290 WHITE RIVER BELOW BOISE CREEK NEAR RANGELY, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)
NOV 20...	<100	34	<10	<0.5	<1	<1	2	1	<1	<1	5
MAY 17...	100	36	<10	<0.5	<1	<1	11	1	6	<1	10

DATE	COPPER, DIS-SOLVED (UG/L AS CU)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM TOTAL RECOV-ERABLE (UG/L AS LI)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)
NOV 20...	2	<5	<5	10	50	11	<0.1	<0.1	3	2
MAY 17...	9	8	<5	20	300	7	<0.1	<0.1	18	1

DATE	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)
NOV 20...	2	<1	2	2	<1.0	1100	<10	<3	3.4	<0.01
MAY 17...	17	2	<1	1	1.0	330	40	<3	12	--

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	TUR-BID-ITY (FTU)
OCT 06...	1250	370	820	--	10.5	--
JAN 19...	1225	459	721	--	0.0	--
MAR 24...	0900	987	826	--	4.5	--
24...	1025	987	826	--	3.0	--
28...	1515	993	840	8.3	4.5	320
APR 13...	1345	635	810	--	11.5	--
MAY 05...	1500	914	610	8.4	13.0	50
10...	1105	881	581	--	12.0	--
12...	1715	1210	530	8.1	16.0	83
20...	1345	2590	371	--	10.5	--
27...	1500	1900	390	8.1	14.0	55
JUN 10...	1430	2350	327	8.1	15.0	61
13...	1110	1890	352	--	15.0	--
29...	1230	1170	550	8.4	16.5	26
JUL 01...	1510	892	600	8.6	22.0	13
08...	1440	707	655	8.6	22.0	14
22...	1255	492	633	--	20.5	--
29...	1330	371	730	--	22.0	--
29...	1810	365	730	--	20.0	--
AUG 16...	1100	378	864	--	20.5	--
SEP 16...	1130	425	749	--	13.0	--

09306290 WHITE RIVER BELOW BOISE CREEK NEAR RANGELY, CO--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT					
07...	1923	365	35	34	--
14...	1745	465	141	177	--
23...	0713	512	116	160	--
29...	1711	512	106	147	--
NOV					
10...	1650	460	119	148	--
18...	1014	518	141	197	--
20...	1600	598	165	266	68
28...	1535	518	131	183	--
DEC					
06...	1720	518	132	185	--
15...	1720	381	136	140	--
24...	1200	420	156	177	--
MAR					
04...	1737	480	1990	2580	--
21...	1557	930	2290	5750	--
24...	1025	987	2300	6130	87
28...	1515	993	3360	9010	85
APR					
01...	1715	640	221	382	--
09...	1848	668	528	952	--
17...	1841	1020	1110	3060	--
24...	1858	878	352	834	--
MAY					
02...	1927	1070	448	1290	--
05...	1500	914	297	733	52
09...	1715	964	157	409	--
12...	1715	1210	790	2580	56
16...	2000	2270	1210	7420	--
24...	1930	1650	332	1480	--
27...	1500	1900	398	2040	46
31...	2030	2000	299	1610	--
JUN					
06...	1800	2660	872	6260	--
10...	1430	2350	456	2890	49
13...	1900	2230	370	2230	--
23...	1545	1210	142	464	52
29...	1230	1170	138	436	70
29...	1900	1140	178	548	--
JUL					
01...	1510	892	65	157	59
04...	1607	794	69	148	--
08...	1440	707	58	111	60
15...	0818	560	107	162	--
22...	0855	524	99	140	--
29...	1330	371	86	86	61
29...	1810	365	67	66	--
AUG					
05...	1337	465	208	261	--
16...	0750	360	209	203	--
24...	1030	426	99	114	--
26...	1530	381	41	42	78
SEP					
03...	1945	332	35	31	--
10...	1800	250	16	11	--
19...	1630	450	24	29	--
24...	1200	477	77	99	--

09306290 WHITE RIVER BELOW BOISE CREEK NEAR RANGELY, CO--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM
MAY							
17...	1230	2260	965	5890	18	24	29
20...	1330	2590	672	4700	17	23	29

DATE	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. FALL DIAM. % FINER THAN .250 MM	SED. SUSP. FALL DIAM. % FINER THAN .500 MM	SED. SUSP. FALL DIAM. % FINER THAN 1.00 MM
MAY						
17...	31	71	89	97	100	100
20...	36	63	78	95	100	100

09339900 EAST FORK SAN JUAN RIVER ABOVE SAND CREEK, NEAR PAGOSA SPRINGS, CO

LOCATION.--Lat 37°23'23", long 106°50'26", Archuleta County, Hydrologic Unit 14080101, on right bank 0.3 mi upstream from Sand Creek, 4.0 mi upstream from West Fork San Juan River, and 13 mi northeast of Pagosa Springs.

DRAINAGE AREA.--64.1 mi².

PERIOD OF RECORD.--October 1956 to current year. Prior to October 1959, published as San Juan River above Sand Creek, near Pagosa Springs.

REVISED RECORDS.--WSP 1713: 1957.

GAGE.--Water-stage recorder. Elevation of gage is 8,900 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 18-19, Nov. 22 to Dec. 5, and Dec. 9 to Mar. 20. Records good except for estimated daily discharges, which are poor. Diversions upstream from station for irrigation of about 500 acres of hay meadows upstream from station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--32 years, 90.1 ft³/s; 65,280 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,260 ft³/s, Sept. 14, 1970, gage height, 6.75 ft, from rating curve extended above 460 ft³/s, on basis of slope-area measurement at gage height, 6.13 ft; minimum daily determined, 3.4 ft³/s, Dec. 26, 1958.

EXTREMES OUTSIDE PERIOD OF RECORD.--Greatest flood since at least 1885 occurred Oct. 5, 1911.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 500 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
May 17	2300	*385	*4.15				

Minimum daily, 7.0 ft³/s, Dec. 14.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	23	11	8.5	9.0	19	29	113	155	100	56	52
2	14	34	10	8.0	8.5	20	30	97	143	91	56	43
3	14	29	11	8.5	8.5	20	33	90	158	80	46	38
4	13	29	13	9.0	8.5	19	40	91	224	74	40	35
5	13	27	14	9.0	8.0	18	47	102	281	68	43	32
6	13	51	14	10	8.0	18	59	109	303	65	65	29
7	12	42	13	10	8.0	18	78	97	340	61	52	26
8	12	33	13	10	8.5	16	89	89	311	59	43	24
9	12	28	11	9.5	8.5	15	85	85	294	55	37	22
10	12	27	11	8.5	8.5	16	78	90	297	56	32	21
11	12	25	12	8.5	8.5	13	81	98	294	56	29	50
12	12	22	10	8.5	8.5	12	93	121	259	50	32	55
13	15	21	8.5	8.0	8.5	13	104	160	223	47	26	48
14	19	22	7.0	8.0	9.0	12	109	190	185	44	23	43
15	18	21	8.0	8.5	9.0	13	106	225	181	44	22	37
16	15	19	9.0	9.0	9.0	12	108	246	160	43	25	33
17	14	19	10	9.5	9.5	11	97	302	163	39	48	29
18	14	14	12	9.0	10	11	85	341	160	37	35	29
19	14	14	12	8.5	9.5	12	79	264	172	35	32	25
20	13	16	12	8.5	8.5	13	79	211	184	33	26	23
21	13	18	11	8.5	9.0	20	82	164	166	32	23	25
22	12	15	9.5	9.0	9.5	23	77	143	145	29	23	35
23	12	14	11	8.5	10	25	74	136	147	28	41	29
24	14	14	10	8.5	12	28	68	142	145	27	45	25
25	24	13	10	8.0	13	29	62	147	140	27	38	23
26	19	13	10	8.5	14	36	60	158	120	26	33	21
27	17	13	9.5	8.5	15	50	63	181	122	27	68	21
28	16	12	8.5	8.5	16	53	68	209	122	31	52	21
29	16	12	9.0	9.0	17	41	75	222	111	36	60	19
30	19	11	10	9.0	---	38	90	230	101	43	56	19
31	17	---	9.5	9.0	---	33	---	181	---	51	55	---
TOTAL	454	651	329.5	272.0	289.5	677	2228	5034	5806	1494	1262	932
MEAN	14.6	21.7	10.6	8.77	9.98	21.8	74.3	162	194	48.2	40.7	31.1
MAX	24	51	14	10	17	53	109	341	340	100	68	55
MIN	12	11	7.0	8.0	8.0	11	29	85	101	26	22	19
AC-FT	901	1290	654	540	574	1340	4420	9980	11520	2960	2500	1850

CAL YR 1987 TOTAL 35796.5 MEAN 98.1 MAX 718 MIN 7.0 AC-FT 71000
WTR YR 1988 TOTAL 19429.0 MEAN 53.1 MAX 341 MIN 7.0 AC-FT 38540

09342500 SAN JUAN RIVER AT PAGOSA SPRINGS, CO

LOCATION.--Lat 37°15'58", long 107°00'37", in NE¼SW¼ sec.13, T.35 N., R.2 W., Archuleta County, Hydrologic Unit 14080101, on right bank at former bridge site in Pagosa Springs, 0.2 mi upstream from McCabe Creek, 0.6 mi downstream from bridge on U.S. Highway 160, and 2.0 mi upstream from Mill Creek.

DRAINAGE AREA.--298 mi².

PERIOD OF RECORD.--October 1910 to December 1914, May 1935 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 1313: 1914(M).

GAGE.--Water-stage recorder. Datum of gage is 7,052.04 ft above National Geodetic Vertical Datum of 1929. Jan 29 to Mar. 6, 1911, nonrecording gage at site 0.5 mi upstream, at different datum. Mar. 7 to Oct. 4, 1911, nonrecording gage at present site, at different datum. Nov. 23, 1911, to Nov. 14, 1914, nonrecording gage at site 300 ft downstream, at different datum.

REMARKS.--No estimated daily discharges. Records good. Diversions for irrigation of large areas upstream from station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--57 years, 381 ft³/s; 276,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 25,000 ft³/s, Oct. 5, 1911, gage height, 17.8 ft, from floodmarks, from velocity-area study: minimum daily, 9.7 ft³/s, Oct. 5-6, 1956.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known since at least 1885, that of Oct. 5, 1911. Flood of June 29, 1927, reached a stage of 13.5 ft, discharge about 16,000 ft³/s, from information by local residents.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,500 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
May 18	0030	*1,920	*4.62	June 6	2400	1,820	4.52

Minimum daily discharge, 42 ft³/s, Dec. 14.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50	110	62	50	55	130	159	675	691	358	166	192
2	49	193	65	49	55	132	160	556	611	332	214	152
3	49	145	76	54	55	130	182	516	672	301	193	136
4	47	144	84	56	53	118	228	500	1190	274	147	125
5	47	142	88	58	50	114	283	562	1360	242	177	117
6	47	272	83	61	51	118	373	590	1530	234	342	113
7	47	222	81	61	52	120	556	524	1530	216	305	105
8	47	168	79	61	54	100	652	478	1400	200	235	100
9	47	147	64	60	55	99	585	433	1270	188	189	93
10	45	140	68	53	55	109	510	452	1260	210	150	90
11	45	132	74	55	55	96	494	507	1240	226	128	134
12	45	117	60	55	55	78	555	682	1170	185	146	201
13	46	113	52	51	55	86	643	913	1000	157	120	248
14	86	113	42	53	57	75	678	1090	816	139	104	218
15	84	113	53	55	59	85	656	1260	789	125	94	173
16	73	99	55	58	58	83	674	1360	679	141	129	153
17	63	96	75	59	61	71	607	1530	649	123	295	141
18	58	79	74	57	65	71	528	1710	650	115	238	144
19	55	83	73	53	59	73	459	1450	691	103	212	129
20	53	96	70	53	55	90	431	1130	699	124	183	122
21	50	97	65	56	58	118	434	871	612	108	154	190
22	49	89	58	56	63	150	431	721	522	94	139	274
23	47	86	67	54	69	165	400	681	533	85	129	216
24	49	84	62	54	75	183	345	698	514	82	149	181
25	100	77	62	52	80	176	296	688	490	87	144	162
26	81	83	63	53	88	219	268	739	418	82	162	149
27	76	79	55	53	99	323	284	823	373	86	232	139
28	79	70	51	54	113	361	320	971	410	90	192	131
29	76	72	55	56	124	250	380	1020	440	108	199	123
30	101	69	66	57	---	217	514	1080	422	167	184	118
31	100	---	58	57	---	187	---	847	---	242	192	---
TOTAL	1891	3530	2040	1714	1883	4322	13085	26057	24631	5224	5643	4569
MEAN	61.0	118	65.8	55.3	64.9	139	436	841	821	169	182	152
MAX	101	272	88	61	124	361	678	1710	1530	358	342	274
MIN	45	69	42	49	50	71	159	433	373	82	94	90
AC-FT	3750	7000	4050	3400	3730	8570	25950	51680	48860	10360	11190	9060

CAL YR 1987 TOTAL 160754 MEAN 440 MAX 2770 MIN 42 AC-FT 318900
WTR YR 1988 TOTAL 94589 MEAN 258 MAX 1710 MIN 42 AC-FT 187600

09343300 RIO BLANCO BELOW BLANCO DIVERSION DAM, NEAR PAGOSA SPRINGS, CO

LOCATION.--Lat 37°12'11", long 106°48'45", in NW¼ sec.11, T.34 N., R.1 E., Archuleta County, Hydrologic Unit 14080101, on left bank 250 ft downstream from Blanco Diversion Dam, 1.1 mi downstream from Leche Creek, and 12 mi southeast of Pagosa Springs.

DRAINAGE AREA.--69.1 mi².

PERIOD OF RECORD.--March 1971 to current year.

GAGE.--Water-stage recorder. Datum of gage is 7,848.81 ft above National Geodetic Vertical Datum of 1929 (levels by U. S. Bureau of Reclamation).

REMARKS.--Estimated daily discharges: Dec. 1, 3, 4, 14-16, 21, 22, Dec. 28 to Jan. 2, Jan. 9-18, 21-28 Jan. 30 to Feb. 23, Mar. 8, 9, 11-15, and Mar. 17-20. Records good except for estimated daily discharges, which are fair. Flows controlled by diversion dam upstream.

AVERAGE DISCHARGE.--17 years, 50.4 ft³/s; 36,510 acre-ft/yr.

COOPERATION.--Records collected by U.S. Bureau of Reclamation, computed by Colorado Division of Water Resources, and reviewed by Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,810 ft³/s June 8, 1985, gage height, 4.75 ft; minimum daily, 6.9 ft³/s, Dec. 29, 1976.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 360 ft³/s at 1815 Aug. 1, gage height, 3.71 ft; minimum daily, 5.5 ft³/s, Jan. 4.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	69	24	12	16	38	47	42	32	22	39	21
2	17	88	25	10	15	38	50	42	23	22	20	20
3	16	77	26	7.0	13	34	68	42	18	22	20	20
4	16	82	26	5.5	14	31	94	42	18	22	20	20
5	16	65	27	7.3	12	29	115	44	18	22	20	20
6	16	108	24	12	13	31	166	44	20	22	20	20
7	16	79	25	14	13	31	197	43	22	21	20	20
8	15	65	23	15	14	26	181	42	22	22	20	20
9	15	63	21	14	16	27	153	43	22	22	20	20
10	15	58	23	12	16	30	142	42	23	22	21	20
11	15	49	23	12	15	24	151	41	23	21	21	20
12	15	42	22	10	16	26	105	41	22	22	21	21
13	19	41	19	8.0	17	26	41	41	21	21	21	21
14	33	40	18	8.0	16	25	39	42	21	21	21	20
15	25	37	18	8.0	16	23	44	42	22	21	22	21
16	22	33	18	14	18	22	45	44	21	21	21	21
17	21	30	21	14	21	23	44	58	21	21	21	20
18	19	22	20	14	18	23	44	66	21	21	21	20
19	19	28	21	14	18	21	43	45	23	21	20	20
20	18	32	20	14	18	27	42	44	22	21	21	20
21	17	33	18	14	20	45	41	45	21	21	20	21
22	16	28	18	14	20	54	42	44	21	20	20	21
23	16	26	17	14	20	61	42	42	21	19	22	20
24	19	25	18	14	20	63	42	39	22	19	21	20
25	106	23	18	10	22	64	42	40	21	19	21	21
26	57	28	17	10	31	92	42	40	22	20	21	20
27	46	25	16	12	37	119	42	40	21	21	23	21
28	36	23	14	12	40	104	42	40	27	21	50	20
29	32	27	16	14	42	75	42	40	22	20	22	20
30	56	24	16	14	---	64	42	40	21	20	21	20
31	41	---	16	14	---	53	---	40	---	20	21	---
TOTAL	807	1370	628	366.8	567	1349	2230	1340	654	650	692	609
MEAN	26.0	45.7	20.3	11.8	19.6	43.5	74.3	43.2	21.8	21.0	22.3	20.3
MAX	106	108	27	15	42	119	197	66	32	22	50	21
MIN	15	22	14	5.5	12	21	39	39	18	19	20	20
AC-FT	1600	2720	1250	728	1120	2680	4420	2660	1300	1290	1370	1210

CAL YR 1987 TOTAL 23412 MEAN 64.1 MAX 595 MIN 14 AC-FT 46440
WTR YR 1988 TOTAL 11262.8 MEAN 30.8 MAX 197 MIN 5.5 AC-FT 22340

09344000 NAVAJO RIVER AT BANDED PEAK RANCH, NEAR CHROMO, CO

LOCATION.--Lat 37°05'07", long 106°41'20", in NW¼ sec.24, T.33 N., R.2 E., Archuleta County, Hydrologic Unit 14080101, on left bank at downstream side of private bridge on Banded Peak Ranch, 0.5 mi downstream from Aspen Creek, 4.0 mi downstream from East Fork, and 9 mi northeast of Chromo.

DRAINAGE AREA.--69.8 mi².

PERIOD OF RECORD.--October 1936 to current year. Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder. Datum of gage is 7,940.6 ft above National Geodetic Vertical Datum of 1929 (river-profile survey). Prior to Oct. 1, 1949, at datum 3.00 ft, higher.

REMARKS.--Estimated daily discharges: Nov. 19, Nov. 29 to Dec. 2, Dec. 14-16, 21-23, Dec. 27 to Jan. 4, Jan. 11-15, 19-28, Feb. 5-16, 21, Mar. 9, and Mar. 15-16. Records good except for estimated daily discharges, which are fair. Diversions for irrigation of about 430 acres upstream from station.

COOPERATION.--Records collected and computed by Colorado Division of Water Resources and reviewed by Geological Survey.

AVERAGE DISCHARGE.--52 years, 110 ft³/s; 79,700 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,480 ft³/s, June 9, 1980, gage height, [illegible].55 ft, from rating curve extended above 840 ft³/s, on basis of float-area measurement at gage height 4.44 ft; maximum gage height, 7.02 ft, May 13, 1941, present datum; minimum daily discharge, 8.4 ft³/s, Sept. 29, 1960, result of temporary blockage by channel alteration upstream.

EXTREMES OUTSIDE PERIOD OF RECORD.--A major flood occurred Oct. 5, 1911.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 500 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
June 6	2200	*525	*2.46	No other peak greater than base discharge.			

Minimum daily, 24 ft³/s, Jan. 25.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	67	34	30	30	44	55	166	197	156	68	71
2	35	81	34	26	32	44	57	146	181	137	73	64
3	35	70	36	28	31	43	68	137	205	142	61	58
4	34	70	38	28	31	41	79	142	279	129	66	54
5	34	64	39	32	28	41	95	151	354	124	55	52
6	34	84	41	32	28	42	118	154	392	122	70	50
7	34	73	41	32	28	43	149	140	433	108	77	48
8	33	67	41	34	28	36	154	129	428	102	67	44
9	33	64	38	31	28	34	140	122	397	98	62	42
10	33	62	38	30	30	42	129	126	410	106	57	41
11	33	57	40	30	30	38	129	133	392	97	54	68
12	33	53	38	28	30	37	142	173	338	89	61	73
13	35	52	36	26	30	38	156	222	294	82	53	81
14	47	52	34	26	30	37	161	261	254	74	47	65
15	40	50	34	26	32	36	156	290	268	68	43	58
16	37	48	34	32	32	32	156	306	254	74	45	53
17	37	42	36	32	34	37	142	326	244	82	78	52
18	36	37	36	31	33	35	126	366	244	79	71	54
19	35	36	35	30	34	36	118	318	268	73	78	47
20	34	41	35	26	35	40	118	265	272	79	58	46
21	33	41	34	26	34	46	120	216	238	74	54	47
22	33	38	32	26	36	52	114	184	225	89	53	52
23	33	38	34	26	37	57	106	178	211	71	64	48
24	39	38	34	26	38	61	98	191	237	70	70	44
25	86	39	35	24	39	62	98	208	254	65	68	43
26	54	40	34	26	40	74	97	219	208	61	62	42
27	49	38	32	28	41	98	100	261	194	59	142	40
28	44	37	30	30	44	98	108	283	216	64	102	38
29	43	36	32	32	44	78	122	290	191	65	97	38
30	54	36	32	31	---	70	146	290	168	69	84	36
31	49	---	32	30	---	61	---	235	---	66	78	---
TOTAL	1225	1551	1099	895	967	1533	3557	6628	8246	2774	2118	1549
MEAN	39.5	51.7	35.5	28.9	33.3	49.5	119	214	275	89.5	68.3	51.6
MAX	86	84	41	34	44	98	161	366	433	156	142	81
MIN	33	36	30	24	28	32	55	122	168	59	43	36
AC-FT	2430	3080	2180	1780	1920	3040	7060	13150	16360	5500	4200	3070

CAL YR 1987 TOTAL 46586 MEAN 128 MAX 873 MIN 30 AC-FT 92400
WTR YR 1988 TOTAL 32142 MEAN 87.8 MAX 433 MIN 24 AC-FT 63750

09344400 NAVAJO RIVER BELOW OSO DIVERSION DAM, NEAR CHROMO, CO

LOCATION.--Lat 37°01'48", long 106°44'16", in NE¼ sec.9, T.32 N., R.2 E., Archuleta County, Hydrologic Unit 14080101, on left bank 600 ft downstream from Oso Diversion Dam, 5.5 mi east of Chromo, and 6 mi upstream from Little Navajo River.

DRAINAGE AREA.--100.5 mi².

PERIOD OF RECORD.--March 1971 to current year.

GAGE.--Water-stage recorder. Datum of gage is 7,647.71 ft above National Geodetic Vertical Datum of 1929 (levels by U. S. Bureau of Reclamation).

REMARKS.--Estimated daily discharges: Nov. 29 to Dec. 2, Dec. 15, 16, 22, 26-29, Dec. 31 to Jan. 5, Jan. 7, 9-15, Jan. 19 to Feb. 2, Feb. 4-16, 19, and Mar. 16-28. Records good except for estimated daily discharges, which are fair. Flows controlled by diversion dam upstream.

AVERAGE DISCHARGE.--17 years, 66.6 ft³/s; 48,250 acre-ft/yr.

COOPERATION.--Records collected by U.S. Bureau of Reclamation, computed by Colorado Division of Water Resources, and reviewed by Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,330 ft³/s, May 24, 1984, gage height, 4.92 ft; minimum daily, 10 ft³/s, Oct. 10, 11, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 280 ft³/s at 2100 Apr. 7, gage height, 3.36 ft; minimum daily, 26 ft³/s, Jan. 25.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	68	40	34	34	51	67	85	70	57	55	59
2	32	38	40	30	36	52	70	84	56	58	55	59
3	33	70	41	34	34	51	84	89	55	59	56	59
4	32	72	41	34	34	49	104	93	55	58	55	58
5	32	68	44	38	32	47	127	93	55	58	56	58
6	32	85	45	38	32	49	159	92	56	58	56	59
7	32	86	45	39	32	52	202	91	57	58	55	57
8	31	70	44	38	32	45	213	91	56	59	55	51
9	31	66	41	36	32	45	191	89	56	58	55	45
10	31	68	40	36	34	50	169	89	56	57	55	47
11	31	67	42	36	34	44	96	89	55	56	54	86
12	32	61	39	36	34	42	45	89	55	56	55	70
13	33	59	38	34	34	43	46	90	55	58	56	58
14	52	60	34	32	34	41	48	89	57	58	49	56
15	47	59	34	32	38	43	48	90	57	57	45	56
16	44	55	36	39	38	38	48	88	56	55	46	56
17	43	45	37	37	39	44	48	87	57	55	78	56
18	43	38	40	37	39	42	48	87	55	55	58	58
19	42	41	40	36	38	44	48	86	55	55	53	57
20	41	44	40	32	38	48	48	86	56	57	58	56
21	46	49	38	28	38	52	48	86	55	56	56	54
22	36	52	36	28	39	60	48	87	56	56	50	56
23	38	47	40	28	40	66	48	86	55	54	61	57
24	39	46	40	28	40	68	47	85	56	52	66	55
25	89	40	41	26	42	70	47	85	57	54	56	53
26	58	43	40	30	44	90	48	85	57	56	56	49
27	52	51	38	32	47	110	48	85	57	56	56	48
28	48	44	36	34	50	110	48	86	58	56	55	46
29	46	40	38	36	52	104	59	87	57	56	57	45
30	57	40	39	34	---	93	89	86	57	56	58	45
31	51	---	38	34	---	78	---	83	---	54	58	---
TOTAL	1292	1722	1225	1045	1090	1821	2439	2723	1695	1746	1739	1668
MEAN	41.7	57.4	39.5	33.7	37.6	58.7	81.3	87.8	56.5	56.3	56.1	55.6
MAX	89	88	45	39	52	110	213	93	70	53	78	86
MIN	31	38	34	26	32	38	45	84	55	52	45	45
AC-FT	2560	3420	2430	2070	2160	3610	4840	5400	3360	3460	3450	3310

CAL YR 1987 TOTAL 28659 MEAN 78.5 MAX 405 MIN 28 AC-FT 56850
WTR YR 1988 TOTAL 20205 MEAN 55.2 MAX 213 MIN 26 AC-FT 40080

09345200 LITTLE NAVAJO RIVER BELOW LITTLE OSO DIVERSION DAM, NEAR CHROMO, CO

LOCATION.--Lat 37°04'32", long 106°48'38", in SW¼ sec.23, T.33 N., R.1 E., Archuleta County, Hydrologic Unit 14080101, on right bank at Little Oso Diversion Dam, 3.5 mi northeast of Chromo, and 4.0 mi upstream from confluence with Navajo River.

DRAINAGE AREA.--14.2 mi².

PERIOD OF RECORD.--June 1971 to current year.

GAGE.--Water-stage recorder. Datum of gage is 7,756.10 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation).

REMARKS.--Flows controlled by diversion dam upstream.

AVERAGE DISCHARGE.--17 years, 8.62 ft³/s; 6,250 acre-ft/yr.

COOPERATION.--Records collected and computed by U.S. Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 235 ft³/s, May 30, 1979; no flow Apr. 14, 1974, and Oct. 21, 1988.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 58 ft³/s, Apr. 8; no flow, Oct. 21.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.2	6.1	2.8	2.4	2.5	4.3	12	41	21	3.2	3.3	6.1
2	2.2	6.3	2.8	2.4	2.5	4.4	15	34	19	7.0	4.3	4.8
3	2.0	5.3	2.8	2.4	2.8	4.4	10	29	20	6.5	3.0	4.1
4	2.0	5.6	2.9	2.4	2.5	4.1	18	28	24	6.0	2.5	3.8
5	2.0	5.3	3.1	2.4	2.4	4.1	23	32	24	6.0	3.3	3.6
6	2.0	6.9	2.9	2.5	2.4	4.4	35	28	24	6.1	4.9	3.5
7	2.0	5.4	2.9	2.6	2.4	4.6	44	27	23	5.1	3.8	3.0
8	2.0	4.4	2.9	2.5	2.2	4.1	51	22	21	5.1	2.8	2.9
9	1.9	4.6	2.8	2.5	2.4	4.1	49	24	20	6.3	2.4	2.6
10	1.7	4.6	2.8	2.5	2.4	4.1	42	29	19	11	2.2	2.6
11	1.7	4.1	2.8	2.5	2.4	3.8	26	32	18	8.8	2.4	5.4
12	1.7	3.9	2.6	2.4	2.4	3.6	12	31	17	6.1	3.8	5.2
13	1.6	3.6	2.6	2.4	2.4	3.5	11	28	16	5.2	2.5	4.6
14	1.6	3.8	2.6	2.4	2.5	3.5	11	28	14	4.8	2.2	3.9
15	3.2	3.6	2.6	2.2	2.5	3.5	12	28	15	4.4	2.2	4.1
16	2.6	3.5	2.5	2.4	2.5	3.5	11	23	15	4.4	3.0	3.0
17	2.4	3.1	2.6	2.4	2.5	3.6	11	23	12	4.4	8.0	2.9
18	2.2	2.6	2.6	2.4	2.5	3.3	11	28	12	3.9	6.3	3.2
19	2.2	2.9	2.8	2.4	2.5	3.5	11	26	11	3.6	5.4	2.9
20	.54	3.6	2.8	2.2	2.4	4.3	10	28	9.9	4.1	3.2	2.8
21	.00	3.6	2.5	2.2	2.4	6.3	10	26	9.0	3.5	2.8	2.9
22	1.3	3.1	2.5	2.2	2.5	8.0	11	25	8.8	3.3	2.6	3.8
23	1.9	2.9	2.5	2.2	2.5	9.4	9.9	26	8.8	3.0	2.6	3.0
24	2.2	2.9	2.5	2.2	2.6	10	11	26	8.8	3.0	2.8	2.6
25	7.1	2.6	2.5	2.2	2.6	10	10	26	10	3.0	4.3	2.5
26	4.4	2.9	2.4	2.2	2.9	14	10	24	8.0	2.9	6.0	2.5
27	3.5	2.9	2.4	2.2	3.5	16	10	25	7.8	2.9	9.4	2.4
28	2.8	2.9	2.4	2.4	3.8	20	10	25	9.4	3.6	7.2	2.4
29	2.5	2.9	2.4	2.4	4.4	17	17	25	11	3.5	13	2.2
30	4.1	2.9	2.4	2.5	---	15	36	25	9.6	3.0	9.6	2.2
31	3.6	---	2.4	2.5	---	12	---	24	---	2.8	7.2	---
TOTAL	73.14	118.8	82.1	73.5	76.3	216.4	559.9	856	446.1	151.5	139.0	101.5
MEAN	2.36	3.96	2.65	2.37	2.63	6.98	18.7	27.6	14.9	4.89	4.48	3.38
MAX	7.1	6.9	3.1	2.6	4.4	20	51	41	24	11	13	6.1
MIN	.00	2.6	2.4	2.2	2.2	3.3	9.9	22	7.8	2.8	2.2	2.2
AC-FT	145	236	163	146	151	429	1110	1700	885	301	276	201

CAL YR 1987 TOTAL 3838.94 MEAN 10.5 MAX 36 MIN .00 AC-FT 7610
WTR YR 1988 TOTAL 2894.24 MEAN 7.91 MAX 51 MIN .00 AC-FT 5740

09346000 NAVAJO RIVER AT EDITH, CO

LOCATION.--Lat 37°00'10", long 106°54'25", in NW¼NW¼ sec.24, T.32 N., R.1 W., Archuleta County, Hydrologic Unit 14080101, on right bank 290 ft downstream from highway bridge, 0.2 mi southeast of Edith, 0.5 mi upstream from Colorado-New Mexico State line, and 1.3 mi upstream from Coyote Creek.

DRAINAGE AREA.--172 mi².

PERIOD OF RECORD.--Streamflow records, September 1912 to current year. Monthly or yearly discharge only for some periods, published in WSP 1313. Water-quality data available, November 1970 to September 1974. Sediment data available April 1973 to September 1974.

REVISED RECORDS.--WSP 1243: 1943, 1945. WSP 1633: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 7,033.00 ft above National Geodetic Vertical Datum of 1929 (levels by U. S. Bureau of Reclamation). Prior to Jan. 1, 1929, nonrecording gage at site 240 ft upstream, at different datum. June 2, 1935, to June 27, 1941, water-stage recorder at sites 200 and 240 ft upstream, at datum 2.0 ft, higher. June 28, 1941, to June 20, 1961, at site 50 ft downstream at present datum.

REMARKS.--Estimated daily discharges: Nov. 22, Nov. 27 to Dec. 2, Dec. 21, and Dec. 23 to Mar. 3. Records good except for estimated daily discharges, which are poor. Diversions for irrigation of about 1,700 acres upstream from station. Highwater diversions upstream from station into Heron Reservoir through Azotea tunnel began in March 1971. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--58 years (water years 1913-70), 155 ft³/s; 112,300 acre-ft/yr, prior to diversions through Azotea tunnel; 18 years (water years 1971-88), 85.4 ft³/s; 61,870 acre-ft/yr, subsequent to diversion through Azotea tunnel.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,840 ft³/s, Apr. 23, 1942, gage height, 6.55 ft, from rating curve extended above 1,100 ft³/s; minimum daily, 8.0 ft³/s, Sept. 25, 1953, Aug. 7, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 5, 1911, exceeded all other observed floods at this location.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 344 ft³/s at 2300 Apr. 7, gage height, 3.47 ft; maximum gage height, 4.47 ft, Jan. 3 (backwater from ice); minimum daily discharge, 31 ft³/s, Oct. 12.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43	71	38	36	40	65	100	123	91	[illegible]	61	79
2	33	109	42	36	42	65	105	129	[illegible]	[illegible]	63	76
3	34	96	50	38	40	65	134	132	72	[illegible]	[illegible]	75
4	35	87	52	40	38	64	160	135	67	[illegible]	[illegible]	73
5	36	81	51	42	38	61	133	141	71	65	66	73
6	39	95	52	44	36	65	213	138	75	66	71	72
7	38	102	58	44	38	73	264	132	77	[illegible]	75	72
8	38	81	51	44	40	60	281	129	78	66	68	67
9	37	75	48	42	40	53	253	129	[illegible]	[illegible]	[illegible]	57
10	38	72	49	40	40	63	221	132	67	73	65	56
11	37	73	50	40	40	58	161	124	71	75	63	98
12	31	68	48	40	40	54	89	119	72	68	66	87
13	34	65	47	38	40	55	85	112	[illegible]	[illegible]	[illegible]	72
14	43	68	38	38	42	52	91	[illegible]	[illegible]	63	[illegible]	68
15	44	68	38	40	42	53	95	135	73	[illegible]	43	67
16	43	65	39	42	44	61	102	98	75	57	58	66
17	43	56	58	42	44	50	107	97	73	[illegible]	57	66
18	42	49	58	42	46	53	93	103	[illegible]	55	63	68
19	42	50	58	40	44	52	97	115	73	53	68	68
20	43	52	54	40	42	60	85	135	72	56	68	63
21	51	55	50	40	44	77	83	119	68	56	63	67
22	43	55	46	40	46	101	87	120	67	56	58	70
23	42	54	44	40	50	123	91	120	65	56	57	71
24	44	53	44	38	55	129	87	110	66	55	95	68
25	91	51	44	38	60	126	85	108	73	56	91	65
26	69	52	42	38	60	158	93	103	70	61	75	61
27	58	48	40	40	60	216	79	102	[illegible]	61	83	59
28	52	44	38	40	60	217	77	99	84	63	90	58
29	52	42	40	40	65	160	85	93	83	61	99	55
30	63	42	46	42	---	140	137	94	81	61	87	54
31	60	---	42	42	---	116	---	100	---	60	81	---
TOTAL	1398	1969	1449	1246	1316	2744	3819	3600	2184	1952	2175	2053
MEAN	45.1	65.6	46.7	40.2	45.4	88.5	127	116	72.8	63.0	70.2	68.4
MAX	91	109	58	44	65	217	281	141	91	75	99	98
MIN	31	42	38	36	36	50	77	93	62	53	48	54
AC-FT	2770	3910	2870	2470	2610	5440	7570	7140	4330	3870	4310	4070

CAL YR 1987 TOTAL 37046 MEAN 101 MAX 369 MIN 31 AC-FT 73480
WTR YR 1988 TOTAL 25905 MEAN 70.8 MAX 281 MIN 31 AC-FT 51380

09346400 SAN JUAN RIVER NEAR CARRACAS, CO

LOCATION.--Lat 37°00'49", long 107°18'42", in SE¼SW¼ sec.17, T.32 N., R.4 W., Archuleta County, Hydrologic Unit 14080101, on right bank just upstream from flow line of Navajo Reservoir, 3 mi northwest of Carracas, 7.2 mi upstream from Piedra River, and at mile 332.8.

DRAINAGE AREA.--1,230 mi², approximately.

PERIOD OF RECORD.--Streamflow records, October 1961 to current year. Water-quality data available, July 1969 to August 1973. Sediment data available, August 1973.

GAGE.--Water-stage recorder and crest stage gage. Elevation of gage is 6,090 ft above National Geodetic Vertical Datum of 1929, from river-profile map.

REMARKS.--Estimated daily discharges: Nov. 25, Nov. 27 to Dec. 3, Dec. 10, and Dec. 12 to Mar. 10. Records fair except for estimated daily discharges, which are poor. Diversions for irrigation of about 11,000 acres upstream from station. Highwater diversions upstream from station into Rio Grande basin through Azotea tunnel (station 08284160) began in March 1971. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--9 years (water years 1962-70), 632 ft³/s; 457,900 acre-ft/yr, prior to completion of Azotea tunnel; 18 years (water years 1971-88), 657 ft³/s; 476,000 acre-ft/yr, since completion of Azotea tunnel.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,730 ft³/s, Sept. 6, 1970, gage height, 8.34 ft, from rating curve extended above 6,000 ft³/s, on basis of slope-area measurement of peak flow; minimum daily, about 5 ft³/s, Dec. 10, 1961, result of freezeup.

EXTREMES OUTSIDE PERIOD OF RECORD.--Major floods occurred Sept. 5 or 6, 1909; Oct. 5, 1911; June 29, 1927.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,500 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
May 18	0900	*2,300	*4.68				

Minimum daily, 110 ft³/s, Dec. 14, 15.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	128	235	160	130	150	380	532	910	925	697	304	369
2	120	501	150	130	150	370	535	954	904	720	312	305
3	119	370	170	130	150	360	629	769	761	597	325	268
4	112	326	204	140	150	340	785	742	1040	514	276	249
5	113	312	221	150	140	340	881	787	1500	434	261	238
6	115	430	208	150	140	350	983	844	1650	398	349	228
7	117	500	192	160	140	330	1150	775	1710	365	554	216
8	112	386	195	160	150	300	1270	735	1530	331	392	201
9	113	330	173	150	150	300	1210	690	1400	325	313	189
10	113	300	150	150	150	310	1100	701	1350	333	276	176
11	111	280	176	140	150	270	1050	733	1350	401	236	188
12	111	257	150	140	150	232	1000	843	1340	348	231	285
13	112	240	130	140	150	228	1000	1040	1220	293	249	368
14	127	245	110	140	160	221	1030	1250	1070	264	208	347
15	196	260	110	140	160	214	1040	1480	1010	242	195	297
16	177	246	130	150	160	248	1090	1650	986	238	224	265
17	159	213	180	150	170	208	1120	1800	914	231	557	248
18	151	204	180	150	190	209	980	2160	921	221	455	242
19	145	179	180	150	170	220	877	2040	921	197	394	235
20	133	200	170	140	160	298	804	1810	960	189	326	221
21	135	211	160	140	160	450	795	1380	906	214	284	221
22	140	214	150	150	170	640	802	1090	797	192	261	257
23	136	201	150	140	190	764	809	995	774	179	227	351
24	135	198	160	140	210	836	768	920	801	173	261	301
25	213	180	150	140	230	698	696	904	795	170	287	272
26	282	192	150	140	260	871	632	905	697	176	307	253
27	222	170	150	140	300	1080	619	952	645	176	396	242
28	203	170	130	140	320	1260	631	1100	726	179	370	226
29	183	160	130	150	350	925	669	1170	702	191	411	214
30	201	160	150	150	---	736	772	1280	807	237	361	201
31	244	---	160	150	---	633	---	1110	---	327	343	---
TOTAL	4636	7875	4969	4470	5270	14521	26259	34419	31012	9552	9945	7773
MEAN	151	262	160	144	182	468	875	1110	1034	308	321	259
MAX	282	501	221	160	350	1260	1270	2160	1710	720	557	369
MIN	111	160	110	130	140	208	532	690	645	170	195	176
AC-FT	9290	15620	9860	8870	10450	28800	52080	68270	61510	18950	19730	15420

CAL YR 1987 TOTAL 269333 MEAN 738 MAX 3710 MIN 110 AC-FT 534200
WTR YR 1988 TOTAL 160751 MEAN 439 MAX 2160 MIN 110 AC-FT 318800

SAN JUAN RIVER BASIN

09349800 PIEDRA RIVER NEAR ARBOLES, CO

LOCATION.--Lat 37°05'18", long 107°23'50", in NE¼SW¼ sec.21, T.33 N., R.5 W., Archuleta County, Hydrologic Unit 14080102, on left bank 3 mi downstream from Ignacio Creek, 4.6 mi northeast of Arboles Post Office, and 2.5 mi upstream from Navajo Reservoir.

DRAINAGE AREA.--629 mi².

PERIOD OF RECORD.--Streamflow records, August 1962 to current year. Gage operated 1895-99 and 1910-27 at site 7.5 mi downstream at altitude 6,000 ft. Low-flow records probably not equivalent. Water-quality data available, November 1972 to August 1973.

GAGE.--Water-stage recorder. Elevation of gage is 6,147.52 ft above National Geodetic Vertical Datum of 1929, Colorado State Highway Department benchmark.

REMARKS.--Estimated daily discharges: Dec. 13-20, 24, Dec. 29 to Feb. 21, Apr. 14 to May 3, July 21-31, and Aug. 17-23. Records good except for estimated daily discharges, which are poor. Diversions for irrigation of about 2,800 acres upstream from station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--26 years, 414 ft³/s, 299,900 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,370 ft³/s, Sept. 6, 1970, gage height, 6.38 ft, recorded, 7.55 ft, from floodmarks, from rating curve extended above 4,400 ft³/s, on basis of slope-area measurement of peak flow; minimum discharge, 11 ft³/s Dec. 9, 1963, Oct. 1, 1966.

EXTREMES OUTSIDE PERIOD OF RECORD.--Major floods occurred Sept. 5 or 6, 1909, and Oct. 5, 1911.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,500 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
May 19	0400	*1,480	*2.98				

Minimum daily, 60 ft³/s, Dec. 14.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	91	145	93	80	85	266	289	740	680	445	148	307
2	89	240	93	75	85	266	324	670	600	391	145	271
3	87	217	105	80	85	254	394	590	614	375	173	235
4	85	189	103	85	80	227	491	552	814	399	160	210
5	83	181	107	90	80	223	552	580	937	341	145	200
6	81	396	117	90	80	216	572	607	1130	307	399	185
7	81	389	105	95	80	238	683	558	1180	280	621	171
8	79	290	105	95	80	182	860	525	1110	250	446	151
9	79	239	97	90	85	167	833	480	1040	250	352	136
10	79	213	93	85	85	191	729	494	986	254	294	128
11	79	192	97	80	85	149	700	556	988	266	263	136
12	79	168	93	80	85	136	733	662	980	246	235	232
13	79	157	75	80	85	128	830	822	856	213	216	455
14	93	157	60	80	90	125	860	941	723	189	192	389
15	127	174	70	85	90	130	850	1060	651	174	179	316
16	120	151	75	90	90	142	840	1170	644	171	295	273
17	110	137	90	90	90	118	760	1230	591	160	510	243
18	101	125	100	85	100	115	650	1350	534	154	440	222
19	98	05	100	80	95	122	560	1360	590	136	380	206
20	93	115	95	80	90	130	500	1110	608	136	330	192
21	89	122	95	85	90	163	500	865	567	130	290	247
22	85	120	87	85	97	229	500	743	501	120	250	506
23	85	115	91	85	99	287	470	679	500	100	230	415
24	87	115	90	85	107	358	410	664	518	95	286	351
25	112	105	97	80	114	340	370	685	524	90	288	307
26	120	115	95	80	123	413	320	678	439	90	257	277
27	110	105	93	80	147	557	330	712	415	90	343	254
28	105	95	81	80	211	736	350	816	437	95	389	240
29	105	91	85	85	249	462	410	852	534	100	341	216
30	120	95	95	90	---	421	530	930	559	130	311	201
31	139	---	90	85	---	361	---	793	---	180	357	---
TOTAL	2970	5058	2872	2615	2962	7852	17200	24474	21309	6357	9264	7672
MEAN	95.8	169	92.6	84.4	102	253	573	789	710	205	299	256
MAX	139	396	117	95	249	736	860	1360	1180	445	621	506
MIN	79	91	60	75	80	115	289	480	415	90	145	128
AC-FT	5890	10030	5700	5190	5880	15570	34120	48540	42270	12610	18380	15220

CAL YR 1987 TOTAL 225992 MEAN 619 MAX 2830 MIN 60 AC-FT 448300
WTR YR 1988 TOTAL 110605 MEAN 302 MAX 1360 MIN 60 AC-FT 219400

09352900 VALLECITO CREEK NEAR BAYFIELD, CO

(Hydrologic bench-mark station)

LOCATION.--Lat 37°28'39", long 107°32'35", in NE¼NW¼ sec.16, T.37 N., R.6 W., La Plata County, Hydrologic Unit 14080101, on right bank 60 ft upstream from Fall Creek, 0.8 mi downstream from Bear Creek, 6.7 mi north of Vallecito Dam, and 18 mi north of Bayfield.

DRAINAGE AREA.--72.1 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1962 to current year.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 7,906.80 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Oct. 9-27, Nov. 17-20, Nov. 27 to Dec. 2, Dec. 9-10, 12-17, 28-29, 31, Jan. 1, 7-8, 10-14, 19-20, 29, Feb. 5-22, Mar. 8-19, Apr. 2-28, and May 1-23. Records good except for estimated daily discharges, which are poor. No diversion upstream from station.

AVERAGE DISCHARGE.--26 years, 149 ft³/s; 108,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,050 ft³/s, Sept. 6, 1970, gage height, 5.51 ft, from water-stage recorder, 6.76 ft, from floodmarks, from rating curve extended above 1,400 ft³/s, on basis of slope-area measurement of peak flow; minimum daily, 6.7 ft³/s, Dec. 28, 1976.

EXTREMES OUTSIDE PERIOD OF RECORD.--Major floods occurred in October 1911 and June 1927.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Aug. 6	1200	*1,100	*2.95				

Minimum daily, 14 ft³/s, Mar. 17.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	59	30	20	17	25	49	190	217	260	152	154
2	32	74	30	17	17	25	50	180	232	229	157	134
3	31	69	34	16	17	24	50	170	406	216	137	120
4	30	71	32	15	17	23	55	160	596	236	117	107
5	29	74	31	20	15	23	60	170	557	212	107	100
6	29	106	29	20	15	23	70	180	568	208	614	98
7	28	92	29	18	15	24	90	170	623	192	607	90
8	27	84	29	19	15	20	95	160	561	176	326	86
9	26	80	26	20	15	20	90	150	552	159	214	81
10	26	77	28	18	15	22	85	160	564	154	169	79
11	26	72	29	18	15	18	90	200	536	153	144	88
12	26	66	24	18	16	16	100	270	454	147	137	229
13	26	65	20	19	16	17	110	350	389	144	122	256
14	46	65	17	18	16	16	110	420	308	137	107	205
15	50	61	20	20	17	17	120	480	326	122	100	177
16	44	53	22	19	17	16	120	530	320	115	167	168
17	38	46	26	19	17	14	120	550	338	107	352	157
18	34	40	31	16	18	15	100	530	338	105	272	153
19	32	42	28	18	17	17	100	540	367	102	213	140
20	30	44	25	19	16	20	100	400	397	96	173	122
21	30	45	24	20	16	23	100	330	363	96	151	315
22	28	43	24	19	16	29	100	260	333	92	147	364
23	28	41	24	18	18	35	90	240	314	88	137	257
24	32	40	24	17	19	37	90	314	332	84	127	209
25	60	40	24	17	19	39	85	355	350	84	133	177
26	50	38	24	16	22	49	90	300	368	82	120	156
27	44	34	23	16	23	61	90	331	409	84	167	145
28	42	34	20	17	24	66	100	429	381	92	168	127
29	45	32	20	17	25	58	110	438	333	100	157	115
30	54	32	23	18	---	56	143	369	281	98	168	108
31	53	---	22	17	---	52	---	265	---	109	170	---
TOTAL	1108	1719	792	559	505	900	2762	9591	12113	4279	6032	4717
MEAN	35.7	57.3	25.5	18.0	17.4	29.0	92.1	309	404	138	195	157
MAX	60	106	34	20	25	66	143	550	623	260	614	364
MIN	26	32	17	15	15	14	49	150	217	82	100	79
AC-FT	2200	3410	1570	1110	1000	1790	5480	19020	24030	8490	11960	9360

CAL YR 1987 TOTAL 65440 MEAN 179 MAX 1030 MIN 13 AC-FT 129800
WTR YR 1988 TOTAL 45077 MEAN 123 MAX 623 MIN 14 AC-FT 89410

09352900 VALLECITO CREEK NEAR BAYFIELD, CO--Continued
(Hydrologic Bench-Mark Station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical analyses: October 1963 to September 1968; October 1969 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: November 1962 to September 1982.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: (Water years 1963-82) Maximum, 20.0°C July 10, 1974; minimum, 0.0°C on many days during winter months each year

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	TUR-BID-ITY (FTU)	OXYGEN, DIS-SOLVED (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
DEC												
18...	0945	36	66	6.7	0.0	0.2	10.5	K0	K0	34	10	2.1
MAR												
22...	1000	29	58	7.5	2.0	6.2	11.4	K0	26	37	11	2.2
JUN												
13...	1230	389	44	8.1	7.0	0.5	10.3	K0	K11	20	5.7	1.3
SEP												
26...	1200	157	68	8.6	8.5	1.6	--	K3	--	20	9.0	2.0

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
DEC												
18...	1.0	0.1	0.7	31	0	26	8.8	1.7	0.3	4.2	47	44
MAR												
22...	1.2	0.1	0.8	35	0	29	8.5	0.7	0.1	4.2	46	49
JUN												
13...	0.5	0.0	0.4	16	1	16	6.6	0.2	0.3	2.5	48	28
SEP												
26...	0.9	0.1	0.7	27	0	22	7.7	0.6	0.1	3.5	40	40

DATE	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHOROUS TOTAL (MG/L AS P)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P)	PHOS-PHOROUS ORTHO, DIS-SOLVED (MG/L AS P)
DEC											
18...	0.06	4.54	<0.01	<0.10	<0.01	<0.01	--	1.0	<0.01	0.01	<0.01
MAR											
22...	0.06	3.58	<0.01	0.16	0.05	0.06	0.55	0.6	0.02	0.02	0.02
JUN											
13...	0.06	50.4	<0.01	0.13	<0.01	0.02	--	<0.2	<0.01	<0.01	<0.01
SEP											
26...	0.05	17.0	<0.01	<0.10	<0.01	<0.01	--	0.4	<0.01	<0.01	<0.01

DATE	TIME	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)
DEC											
18...	0945	20	<1	16	<0.5	<1	1	<3	1	10	<5
MAR											
22...	1000	20	<1	18	<0.5	<1	<1	<3	6	16	<5
JUN											
13...	1230	60	<1	13	<0.5	<1	<1	<3	3	18	<5
SEP											
26...	1200	50	<1	13	<0.5	2	<1	<3	2	10	<5

K BASED ON NON-IDEAL COLONY COUNT.

09352900 VALLECITO CREEK NEAR BAYFIELD, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)
DEC 18...	<4	<1	<0.1	<10	3	<1	1.0	28	<6	<3
MAR 22...	<4	1	<0.1	<10	<1	<1	<1.0	30	<6	11
JUN 13...	<4	13	<0.1	<10	2	<1	<1.0	16	<6	9
SEP 26...	<4	9	<0.1	<10	2	<1	<1.0	24	<6	7

RADIOCHEMICAL ANALYSES, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	GROSS ALPHA, DIS-SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS-SOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	RADIUM 226, DIS-SOLVED, RADON METHOD (PCI/L)	URANIUM NATURAL DIS-SOLVED (UG/L AS U)
DEC 18...	0945	<0.4	<0.4	0.8	<0.4	0.7	<0.4	0.02	0.09
JUN 13...	1230	<0.4	<0.4	1.0	<0.4	1.0	<0.4	0.07	0.16

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
DEC 18...	0945	36	--	50	0
MAR 22...	1000	29	3	0.23	69
JUN 13...	1230	389	14	15	77
SEP 26...	1200	157	1	0.42	7

09353000 VALLECITO RESERVOIR NEAR BAYFIELD, CO

LOCATION.--Lat 37°23'00", long 107°34'30", in SW¼SW¼ sec.18, T.36 N., R.6 W., La Plata County, Hydrologic Unit 14080101, in gatehouse above outlet gates at Vallecito Dam on Los Pinos (Pine) River, 300 ft left of spillway, 0.4 mi upstream from Jack Creek, and 11 mi northeast of Bayfield.

PERIOD OF RECORD.--April 1941 to current year.

REVISED RECORDS.--WSP 959: 1941. WSP 1513: 1956.

GAGE.--Water-stage recorder. Elevation of gage is 7,580 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation); gage readings have been reduced to elevations above National Geodetic Vertical Datum.

REMARKS.--Reservoir is formed by earth and rockfill dam; dam completed in March 1941. Capacity of reservoir, 125,640 acre-ft between elevations 7,580 ft, sill of outlet gate, and 7,665 ft, top of spillway gates. Dead storage, 3,395 acre-ft. Figures given are usable contents. Reservoir is used to store water for irrigation in Los Pinos (Pine) River basin.

COOPERATION.--Records provided by Pine River Irrigation District.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 128,200 acre-ft, July 27, 1957, elevation, 7,665.72 ft; minimum, 1,520 acre-ft, Oct. 24-25, 1944, elevation, 7,584.10 ft. No usable storage prior to April 1941.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 107,340 acre-ft, June 29, elevation, 7,658.10 ft; minimum, 52,560 acre-ft, Feb. 14-15, elevation, 7,634.13 ft.

MONTHEND ELEVATION IN FEET NGVD AND CONTENTS, AT 0900, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

Date	Elevation	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.	7,644.05	73,320	-21,390
Oct. 31.	7,637.00	58,220	-15,100
Nov. 30.	7,635.47	55,170	-3,050
Dec. 31.	7,634.96	54,170	-1,000
CAL YR 1987	-	-	+1,490
Jan. 31.	7,634.48	53,230	-940
Feb. 29.	7,634.47	53,210	-20
Mar. 31.	7,636.85	57,920	+4,710
Apr. 30.	7,644.76	74,920	+17,000
May 31.	7,652.93	94,280	+19,360
June 30.	7,658.07	107,260	+12,980
July 31.	7,650.42	88,170	-19,090
Aug. 31.	7,649.35	85,600	-2,570
Sept. 30.	7,647.76	81,840	-3,760
WTR YR 1988	-	-	-12,870

09354500 LOS PINOS RIVER AT LA BOCA, CO

LOCATION.--Lat 37°00'34", long 107°35'56", in NE¼NW¼ sec.22, T.32 N., R.7 W., La Plata County, Hydrologic Unit 14080101, on downstream end of right abutment of the Denver & Rio Grande Western Railroad Co. bridge, at southeast edge of La Boca, 0.1 mi upstream from Spring Creek, and 2 mi upstream from maximum elevation of Navajo Reservoir.

DRAINAGE AREA.--510 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Streamflow records, October 1950 to current year. Monthly discharge only for some periods, published in WSP 1733. Water-quality data available, July 1969 to August 1973.

GAGE.--Water-stage recorder. Datum of gage is 6,143.59 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Dec. 13 to Feb. 17. Records good except for estimated daily discharges, which are poor. Flow regulated by Vallecito Reservoir (station 09353000) 24 mi upstream since April 1941. Diversions for irrigation of about 33,000 acres upstream from station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--38 years, 240 ft³/s; 173,900 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,400 ft³/s, July 27, 1957, gage height, 8.95 ft, from rating curve extended above 5,100 ft³/s; minimum daily, 6.1 ft³/s, May 1, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--A flood on Oct. 5, 1911 has not yet been exceeded.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,050 ft³/s at 1400 Aug. 5, gage height, 5.64 ft; minimum daily, 55 ft³/s, Dec. 14, May 10.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	179	348	206	110	120	473	103	133	179	264	247	185
2	173	460	192	110	120	456	107	113	161	241	241	182
3	179	316	213	110	120	373	103	66	150	227	180	173
4	173	280	210	110	120	354	110	61	148	241	170	167
5	173	271	203	110	120	340	115	73	143	224	170	164
6	167	374	213	110	120	284	122	69	145	210	653	161
7	155	350	213	110	120	252	137	89	143	199	434	145
8	155	309	213	110	120	147	150	85	152	189	282	133
9	158	284	213	110	120	130	152	81	162	195	255	120
10	173	287	213	110	120	137	139	55	147	195	224	118
11	176	299	210	110	100	104	130	81	181	209	223	147
12	185	295	209	110	100	97	125	109	253	170	254	184
13	199	291	140	110	100	91	125	99	204	150	221	192
14	226	304	55	120	100	87	132	110	185	150	203	176
15	316	335	85	85	100	85	147	122	173	150	192	167
16	284	322	85	100	100	91	172	122	195	145	265	170
17	169	304	85	120	90	79	285	127	192	155	374	167
18	141	294	85	120	87	76	228	208	185	148	269	198
19	142	287	85	120	87	81	189	254	176	123	238	179
20	155	295	85	120	83	83	167	238	173	127	224	173
21	176	317	85	120	85	97	153	210	170	142	223	198
22	167	304	85	120	91	112	164	191	158	133	223	306
23	179	283	85	120	93	125	173	179	167	142	223	236
24	240	214	85	120	101	132	164	133	170	166	185	234
25	342	206	85	120	118	113	148	140	177	173	185	220
26	300	213	85	120	133	125	133	147	195	153	182	217
27	287	213	95	120	175	140	118	155	223	152	236	174
28	283	210	110	120	265	161	130	150	286	143	244	150
29	287	203	110	120	343	126	135	143	398	150	248	143
30	348	202	110	120	---	120	137	172	306	167	221	152
31	296	---	110	120	---	115	---	192	---	219	193	---
TOTAL	6583	8670	4258	3535	3551	5186	4393	4107	5697	5452	7682	5331
MEAN	212	289	137	114	122	167	146	132	190	176	248	178
MAX	348	460	213	120	343	473	285	254	398	264	653	306
MIN	141	202	55	85	83	76	103	55	143	123	170	118
AC-FT	13060	17200	8450	7010	7040	10290	8710	8150	11300	10810	15240	10570

CAL YR 1987 TOTAL 153082 MEAN 419 MAX 1840 MIN 55 AC-FT 303600
WTR YR 1988 TOTAL 64445 MEAN 176 MAX 653 MIN 55 AC-FT 127800

09354500 LOS PINOS RIVER AT LA BOCA, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical analyses: July 1969 to May 1974, January 1988 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)
JAN												
12...	1330	109	200	8.6	0.0	11.7	92	29	4.7	13	0.6	1.2
JUL												
11...	0930	218	255	8.6	16.5	8.2	93	29	5.1	13	0.6	1.8

DATE	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)
JAN												
12...	99	20	3.0	0.30	5.1	131	136	0.18	38.6	<0.10	<0.10	0.04
JUL												
11...	106	14	2.0	0.20	8.0	144	137	0.20	84.8	<0.10	<0.10	0.03

DATE	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHOROUS TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	PHOS-PHOROUS ORTHO, DIS-SOLVED (MG/L AS P)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)
JAN											
12...	0.36	0.40	0.18	0.02	0.01	320	<1	<10	<1	1	1
JUL											
11...	0.67	0.70	0.08	0.04	0.02	2000	1	20	1	1	1

DATE	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)
JAN											
12...	4	470	20	<5	60	<0.10	2	1	1	<10	2.0
JUL											
11...	18	1800	190	<5	160	<0.10	3	4	<1	10	7.6

DATE	TIME	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS)	CADMIUM RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CD)	CHRO-MIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	COBALT, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CO)	COPPER, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CU)	IRON, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS FE)	LEAD, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS PB)	MANGA-NESE, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	MERCURY RECOV. FM BOT-TOM MA-TERIAL (UG/G AS HG)	SELE-NIUM, TOTAL IN BOT-TOM MA-TERIAL (UG/G)	ZINC, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS ZN)
JAN												
12...	1330	4	<10	<10	<50	6	4900	<10	190	<0.10	1	40

09354500 LOS PINOS RIVER AT LA BOCA, CO--Continued

PESTICIDE ANALYSES, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	PCN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG)
JAN									
12...	1330	<1	<1.0	<0.1	<1.0	<0.1	0.1	<0.1	<0.1

DATE	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDOSULFAN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	MALATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)
JAN								
12...	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1

DATE	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARATHION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRITHION, TOT. IN BOTTOM MATL. (UG/KG)	MIREX, TOTAL IN BOTTOM MATERIAL (UG/KG)	PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	PERTHANE IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)	TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG)
JAN								
12...	<2.0	<0.1	<0.1	<0.1	<0.1	<1.00	<10	<0.1

09355000 SPRING CREEK AT LA BOCA, CO

LOCATION.--Lat 37°00'40", long 107°35'47", in SE¼SW¼ sec.15, T.32 N., R.7 W., La Plata County, Hydrologic Unit 14080101, on right bank in an excavated channel, 0.2 mi upstream from mouth, and 0.2 mi east of La Boca.

DRAINAGE AREA.--58 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Streamflow records, October 1950 to current year. Monthly discharge only for some periods, published in WSP 1733. Water-quality data available, May 1974.

GAGE.--Water-stage recorder. Elevation of gage is 6,160 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 18-21, 25, Nov. 28 to Dec. 4, Dec. 8 to Mar. 3, July 8, 9, Aug. 11, and Sept. 5-30. Records good except those for flows above 125 ft³/s, which are fair, and those for estimated daily discharges, which are poor. Part of flow is return waste from irrigation. Nearly all irrigation in this basin is water diverted from Los Pinos River which causes a considerable change in the annual pattern and natural flow. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--38 years, 32.1 ft³/s; 23,260 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,980 ft³/s, Sept. 6, 1970, gage height, 4.62 ft, from rating curve extended above 160 ft³/s, on basis of field estimate of peak flow; maximum gage height, 5.98 ft, Mar. 9, 1960 (backwater from ice); minimum daily discharge, 0.6 ft³/s, Nov. 27, 1959.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 362 ft³/s at 1300 Aug. 6, gage height, 2.13 ft, maximum gage height, 3.58 ft, Feb. 28 (backwater from ice); minimum daily discharge, 3.4 ft³/s, Dec. 15.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	69	21	5.0	4.2	5.0	34	6.5	4.8	55	61	82	88
2	69	67	5.0	4.0	4.8	48	6.1	5.4	54	60	71	64
3	69	13	5.5	4.2	4.8	90	5.7	57	50	65	56	59
4	67	7.5	6.0	4.4	4.8	84	6.5	14	48	80	54	54
5	72	6.9	6.5	4.6	4.6	58	6.9	11	55	74	50	50
6	71	48	6.5	5.0	4.4	39	6.9	12	55	69	181	48
7	66	30	6.1	5.0	4.6	31	7.3	12	50	64	87	46
8	69	13	5.5	5.0	4.8	15	7.4	15	48	60	66	44
9	61	7.9	5.0	5.0	5.0	11	7.4	15	55	60	62	42
10	54	6.5	5.0	4.8	5.0	11	6.5	12	65	72	60	40
11	50	6.5	5.5	4.6	5.0	9.3	6.1	15	74	73	75	48
12	45	6.1	4.8	4.6	5.0	7.8	5.7	17	78	62	92	75
13	50	6.5	4.2	4.4	5.0	7.8	5.6	24	67	57	69	110
14	57	7.4	3.6	4.4	5.0	7.0	6.1	30	61	57	66	100
15	69	21	3.4	4.6	5.5	6.9	7.3	41	64	60	65	85
16	57	16	4.2	5.0	5.5	6.9	14	40	74	55	80	70
17	50	8.7	5.5	5.0	5.5	6.5	38	45	69	60	184	65
18	47	7.0	6.0	4.8	6.0	6.5	13	57	71	54	84	60
19	40	7.5	6.0	4.6	5.5	6.1	9.3	70	64	45	73	60
20	37	8.5	5.5	4.6	5.0	6.1	7.8	94	65	43	61	55
21	26	8.0	5.0	4.6	6.0	6.1	7.4	73	61	52	67	70
22	22	6.6	4.6	4.8	7.0	7.8	7.8	61	59	50	71	120
23	21	6.5	5.0	4.6	8.5	7.8	7.8	59	54	54	71	100
24	29	6.5	5.0	4.6	10	8.5	7.8	52	59	55	69	85
25	29	6.5	5.0	4.6	12	7.0	7.0	52	80	59	67	75
26	10	7.0	5.0	4.6	15	7.8	6.5	52	80	57	64	70
27	7.0	6.9	4.6	4.6	20	8.5	6.1	47	88	60	99	65
28	6.9	6.0	4.2	4.6	22	11	5.7	46	84	59	70	60
29	6.9	5.5	4.4	4.8	26	7.0	5.6	50	111	60	74	55
30	14	5.5	5.0	5.0	---	6.1	5.2	59	79	64	84	50
31	9.3	---	4.8	5.0	---	6.5	---	60	---	82	78	---
TOTAL	1350.1	381.0	157.4	144.6	227.3	576.0	247.0	1202.2	1977	1883	2432	2013
MEAN	43.6	12.7	5.08	4.66	7.84	18.6	8.23	38.8	65.9	60.7	78.5	67.1
MAX	72	67	6.5	5.0	26	90	38	94	111	82	184	120
MIN	6.9	5.5	3.4	4.0	4.4	6.1	5.2	4.8	48	43	50	40
AC-FT	2680	756	312	287	451	1140	490	2380	3920	3730	4820	3990

CAL YR 1987 TOTAL 17013.1 MEAN 46.6 MAX 182 MIN 3.4 AC-FT 33750
WTR YR 1988 TOTAL 12590.6 MEAN 34.4 MAX 184 MIN 3.4 AC-FT 24970

09355000 SPRING CREEK AT LA BOCA, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical analyses: January 1988 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (US/CM)	PH (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	HARDNESS TOTAL (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)
JAN 12...	1200	5.0	1080	8.3	0.0	11.8	330	93	23	170	4	2.7
JUL 11...	1045	80	355	8.6	17.0	8.5	100	31	6.1	24	1	2.4

DATE	ALKALINITY LAB (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)
JAN 12...	396	270	18	0.60	7.3	816	824	1.11	11.0	0.30	0.28	0.05
JUL 11...	117	32	2.8	0.20	8.0	181	177	0.25	39.2	<0.10	<0.10	0.05

DATE	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHOROUS TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	PHOSPHOROUS ORTHO, DISSOLVED (MG/L AS P)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BORON, DISSOLVED (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)
JAN 12...	0.35	0.40	0.70	0.01	<0.01	<0.01	2500	1	50	<1	4	2
JUL 11...	0.95	1.0	--	0.13	0.08	0.04	7300	1	20	<1	4	1

DATE	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)
JAN 12...	9	3500	16	<5	280	<0.10	6	4	8	20	3.8
JUL 11...	20	6700	160	8	400	<0.10	4	12	<1	50	9.9

DATE	TIME	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG)	SELENIUM, TOTAL IN BOTTOM MATERIAL (UG/G)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)
JAN 12...	1200	8	1	<10	<50	5	3400	<10	540	<0.10	<1	30

09361500 ANIMAS RIVER AT DURANGO, CO

LOCATION.--Lat 37°16'45", long 107°52'47", in SW¼SW¼ sec.20, T.35 N., R.9 W., La Plata County, Hydrologic Unit 14080104, on left bank at abandoned power plant at Durango, 0.8 mi upstream from Lightner Creek.

DRAINAGE AREA.--692 mi².

PERIOD OF RECORD.--June to December 1895, April 1896 to December 1898, April 1899 to December 1900, March to May 1901, April to November 1902, March to April 1903 (gage heights only, erroneously stated as discredited in WSP 1563), May to October 1903, July 1904 to December 1905, January to December 1910 (gage heights only), January to September 1911, January 1912 to current year. Monthly or yearly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 76[illegible] Drainage area. WSP 929: 1927(M). WSP 1243: 1911, 1918(M). WSP 1563: 1911-25 (monthly figures on[illegible].

GAGE.--Water-stage recorder. Datum of gage is 6,501.57 ft above National Geodetic Vertical Datum of 1929. See WSP 1713 or 1733 for history of changes prior to Mar. 2, 1921.

REMARKS.--Estimated daily discharges: Dec. 15, 27, Dec. 31 to Jan. 2, Jan 9, 12-14, 18, and Jan. 21-27. Records good except for estimated daily discharges, which are fair. Diversions for irrigation of about 4,000 acres upstream from station. Natural regulation by many lakes and regulation for power upstream from station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--83 years (water years 1897-1900, 1905, 1911-88), 850 ft³/s; 615,800 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 25,000 ft³/s, Oct. 5, 1911, gage height, 11 ft, present site and datum, from rating curve extended above 13,000 ft³/s; minimum daily, 94 ft³/s, Mar. 2, 1913.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1885, that of Oct. 5, 1911.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,000 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)
June 8	0530	*3,590	*5.22

Minimum daily, 180 ft³/s, Dec. 27.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	287	328	224	210	230	329	378	1060	1370	1490	406	650
2	288	403	213	210	249	341	385	984	1220	1310	448	596
3	276	376	220	214	255	343	381	860	1520	1150	431	544
4	259	339	224	202	253	318	395	791	2550	1160	404	497
5	251	325	232	218	242	305	418	829	2930	1120	367	462
6	260	559	221	224	242	304	447	889	2360	1050	605	454
7	246	584	212	219	244	283	545	850	3160	999	1280	429
8	255	465	212	215	250	306	712	790	3180	933	1070	401
9	247	409	210	210	255	297	690	742	29[illegible]	873	754	355
10	265	380	210	212	255	309	649	758	28[illegible]0	805	637	368
11	266	367	211	219	246	281	640	900	2800	754	595	351
12	253	328	203	210	246	270	642	1160	2390	717	537	472
13	255	327	199	210	253	262	737	1550	2180	692	449	978
14	304	314	198	220	249	276	831	1780	1670	652	398	852
15	327	307	190	223	249	282	837	2210	1590	615	379	735
16	305	287	184	227	253	238	903	2500	1490	600	406	671
17	291	273	196	231	254	280	914	2490	1710	526	618	594
18	284	262	224	220	251	278	801	2470	1740	481	761	546
19	280	250	204	229	255	272	750	2270	1740	460	619	528
20	283	267	195	229	259	238	744	1840	1890	421	563	549
21	293	262	186	230	259	257	774	1450	1980	407	507	666
22	273	253	189	230	261	268	779	1250	1810	393	509	986
23	251	246	204	230	265	322	715	1240	1810	378	496	881
24	249	244	221	230	268	333	665	1380	1880	353	488	777
25	267	244	219	220	275	348	641	1650	1920	347	508	707
26	277	241	213	220	283	368	644	1560	1860	338	471	652
27	292	240	180	230	296	406	639	1630	1760	341	556	619
28	281	232	197	233	311	489	675	2040	1790	345	639	608
29	271	250	187	230	322	465	743	2330	1840	339	573	536
30	319	228	191	232	---	437	843	2300	1630	340	586	461
31	325	---	190	232	---	406	---	1710	---	351	624	---
TOTAL	8580	9590	6359	6869	7530	9951	19967	46263	62030	20740	17684	17925
MEAN	277	320	205	222	260	321	666	1492	2068	669	570	597
MAX	327	584	232	233	322	489	914	2500	3180	1490	1280	986
MIN	246	228	180	202	230	238	378	742	1220	338	367	351
AC-FT	17020	19020	12610	13620	14940	19760	39600	91760	123000	41140	35080	35550

CAL YR 1987 TOTAL 388863 MEAN 1065 MAX 5220 MIN 180 AC-FT 771300
WTR YR 1988 TOTAL 233498 MEAN 638 MAX 3180 MIN 180 AC-FT 463100

09363500 ANIMAS RIVER NEAR CEDAR HILL, NM

LOCATION.--Lat 37°02'17", long 107°52'25", in sec.7, T.32 N., R.9 W., La Plata County, Colorado, Hydrologic Unit 14080104, on right bank 0.8 mi downstream from Florida River, 2.5 mi upstream from Colorado-New Mexico State line, 8.5 mi north of Cedar Hill, and at mile 32.9.

DRAINAGE AREA.--1,090 mi², approximately.

PERIOD OF RECORD.--October 1933 to current year. Monthly discharge only for October and November 1933, published in WSP 1313.

REVISED RECORDS.--WSP 1563: 1940 and 1946 (monthly figures only).

GAGE.--Water-stage recorder. Elevation of gage is 5,960 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Sept. 14, 1937, at datum between 1.52 ft, and 1.36 ft, higher. Sept. 15, 1937, to Sept. 30, 1946, at datum 1.36 ft, higher.

REMARKS.--Estimated daily discharges: Dec. 3 to Jan. 2, and Jan. 20 to Feb. 5. Records good except for estimated daily discharges, which are poor. Diversions for irrigation of about 20,000 acres upstream from station. During water years 1944-49, Twin Rocks Canal diverted upstream from station for irrigation downstream. Slight regulation by Lemon Dam about 30 mi upstream on Florida River since November 1963 (capacity, 40,100 acre-ft). Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--55 years, 925 ft³/s, 670,200 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,100 ft³/s, June 19, 1949, gage height, 11.45 ft; minimum, 63 ft³/s, Jan. 21, 1935.

EXTREMES OUTSIDE PERIOD OF RECORD.--A major flood occurred in October 1911 at this location.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,000 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage Height (ft)
June 8	1200	*3,390	*6.87	No other peak greater than base discharge.			

Minimum daily discharge, 240 ft³/s, Dec. 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	365	560	312	270	330	682	534	1070	1520	1720	463	693
2	371	739	291	305	350	687	474	1100	1250	1490	537	664
3	357	603	288	309	330	618	473	933	1680	1320	491	619
4	331	556	290	320	332	575	498	850	2350	1330	467	581
5	328	574	285	325	340	551	506	850	2700	1320	420	537
6	348	366	282	330	340	495	542	909	2810	1200	717	529
7	341	868	280	340	335	462	609	922	3000	1110	1220	493
8	348	698	280	342	330	434	774	855	2990	1030	1200	481
9	335	601	279	345	332	421	816	790	2870	994	854	420
10	355	570	270	343	324	427	739	777	2720	933	714	413
11	373	550	270	345	322	426	714	884	2710	887	658	397
12	371	483	265	352	316	359	652	1120	2430	815	613	455
13	371	459	263	343	317	359	790	1510	2330	741	527	934
14	435	451	260	338	324	362	869	1710	1920	690	453	931
15	470	449	260	342	316	371	885	2030	1680	653	420	832
16	426	442	255	340	312	380	923	2310	1610	634	441	753
17	387	402	253	342	323	369	1040	2380	1750	590	610	695
18	371	392	250	335	310	350	892	2410	1820	521	843	637
19	358	354	250	330	313	359	802	2270	1810	498	682	603
20	354	376	250	329	320	325	791	1920	1900	453	606	637
21	356	387	247	329	323	340	831	1550	2000	432	553	693
22	352	375	242	332	336	366	846	1360	1870	419	519	1070
23	326	363	240	330	344	440	816	1320	1830	391	554	1020
24	306	354	242	335	348	456	749	1410	1880	381	623	918
25	357	349	244	337	363	462	704	1490	1930	360	566	839
26	355	336	245	340	403	480	685	1500	1890	353	551	782
27	362	333	245	349	460	537	635	1600	1790	355	585	736
28	360	327	252	350	564	632	712	1900	1840	373	759	722
29	350	324	255	351	641	634	808	2180	2020	360	665	667
30	471	333	260	350	---	549	881	2200	1930	359	635	598
31	448	---	268	352	---	512	---	1950	---	416	681	---
TOTAL	11438	14464	8173	10380	10298	14420	21990	46060	62830	23128	19627	20349
MEAN	369	482	264	335	355	465	733	1486	2094	746	633	678
MAX	471	868	312	352	641	687	1040	2410	3000	1720	1220	1070
MIN	306	324	240	270	310	325	473	777	1250	353	420	397
AC-FT	22690	28690	16210	20590	20430	28600	43620	91360	124600	45870	38930	40360

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CAL YR 1987  TOTAL   448166     MEAN   1228     MAX   5270     MIN   240     AC-FT  888900
WTR YR 1988  TOTAL   263157     MEAN    719     MAX   3000     MIN   240     AC-FT  522000
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09365500 LA PLATA RIVER AT HESPERUS, CO

LOCATION.--Lat 37°17'23", long 108°02'24", in NE¼SW¼ sec.14, T.35 N., R.11 W., La Plata County, Hydrologic Unit 14080105, on right bank at Hesperus 700 ft downstream from U.S. Highway 160.

DRAINAGE AREA.--37 mi², approximately.

PERIOD OF RECORD.--June to August 1904, May 1905 to September 1906, August to November 1910, June 1917 to current year. Monthly discharge only for some periods, published in WSP 1313. Records for Nov. 11 to Dec. 31, 1910, published in WSP 289, have been found to be unreliable and should not be used.

REVISED RECORDS.--WSP 1243: 1906(M). WSP 1563: 1923 (monthly figures only). See also PERIOD OF RECORD.

GAGE.--Water-stage recorder. Datum of gage is 8,104.71 ft above National Geodetic Vertical Datum of 1929. Prior to May 1, 1920, nonrecording gage, and May 1, 1920, to May 24, 1927, water-stage recorder, at several sites about 600 ft downstream at different datums. May 25, 1927, to Sept. 30, 1938, water-stage recorder at site 60 ft downstream and Oct. 1, 1938, to Sept. 30, 1941, at present site at datum 1.00 ft, higher.

REMARKS.--Estimated daily discharges: Nov. 18, Nov. 27 to Dec. 2, Dec. 8, 9, 12-17, Dec. 20 to Jan. 28, Jan. 31, Feb. 4-26, Mar. 5, 8, 9, 11-15, 17-20, and Mar. 29. Records good except for estimated daily discharges, which are fair. Cherry Creek ditch exports water upstream from station for irrigation of about 2,000 acres in Cherry Creek drainage.

COOPERATION.--Records collected and computed by Colorado Division of Water Resources and reviewed by Geological Survey.

AVERAGE DISCHARGE.--72 years (water years 1906, 1918-88), 45.4 ft³/s; 32,890 acre-ft/yr.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum flood observed occurred Oct. 5, 1911.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 230 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Jan. 12	1515	---	*a3.35	May 17	2045	*290	3.21

Minimum daily discharge, 6.0 ft³/s, Jan. 24.
a-Backwater from ice.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	17	12	8.0	8.0	12	40	124	63	35	23	39
2	11	20	12	7.0	8.0	11	39	113	66	33	23	34
3	11	19	12	7.0	7.9	14	45	91	131	31	20	31
4	10	20	13	8.0	9.0	15	42	97	139	53	17	32
5	10	23	13	10	7.0	14	42	86	153	40	15	32
6	9.7	62	13	11	7.0	17	47	82	169	34	22	28
7	9.1	46	12	9.0	7.0	18	65	73	145	31	48	35
8	8.8	37	11	9.0	7.0	14	83	65	125	29	33	32
9	8.7	35	11	9.0	7.0	16	91	58	112	26	26	31
10	8.4	33	11	9.0	7.5	19	75	61	112	27	23	29
11	8.4	31	11	10	7.0	16	74	95	124	33	22	41
12	8.4	28	11	9.0	8.0	14	92	120	94	27	23	57
13	9.0	26	10	8.0	9.0	16	111	151	74	24	22	67
14	12	25	9.0	8.0	9.0	16	93	161	61	23	17	52
15	9.9	24	9.0	9.0	8.0	17	86	159	59	21	17	44
16	8.9	22	9.0	10	9.0	17	93	208	55	23	23	33
17	9.0	20	10	10	8.0	16	89	238	51	18	24	33
18	9.7	16	11	9.0	8.0	15	76	198	54	16	24	30
19	9.4	18	11	8.0	8.0	17	68	154	57	14	19	28
20	9.5	17	10	7.0	9.0	17	65	107	58	15	17	25
21	9.1	17	8.0	7.0	8.0	18	65	78	51	16	16	33
22	8.4	16	9.0	7.0	8.0	20	63	75	44	16	18	35
23	8.4	16	10	7.0	8.0	22	59	83	52	16	21	30
24	9.4	15	9.0	6.0	8.0	23	57	107	48	16	27	23
25	10	15	9.0	7.0	9.0	26	56	109	44	15	27	26
26	9.8	15	9.0	7.0	9.0	31	54	97	39	14	23	24
27	10	14	9.0	8.0	9.3	44	53	120	44	14	36	22
28	10	14	8.0	9.0	10	55	62	152	48	13	39	20
29	12	13	9.0	8.3	11	45	75	157	43	14	31	19
30	15	13	9.0	8.0	---	48	101	135	38	14	40	18
31	13	---	8.0	8.0	---	44	---	87	---	15	35	---
TOTAL	307.0	688	317.0	256.3	235.7	689	2055	3663	2288	715	762	940
MEAN	9.90	22.9	10.2	8.27	8.13	22.2	68.5	118	76.3	23.1	24.6	31.3
MAX	15	62	13	11	11	55	111	238	169	53	48	67
MIN	8.4	13	8.0	6.0	7.0	12	39	58	38	13	15	18
AC-FT	609	1360	629	508	468	1370	4080	7270	4540	1420	1510	1860

CAL YR 1987 TOTAL 21092.7 MEAN 57.8 MAX 408 MIN 5.5 AC-FT 41840
WTR YR 1988 TOTAL 12916.0 MEAN 35.3 MAX 238 MIN 6.0 AC-FT 25620

09366500 LA PLATA RIVER AT COLORADO-NEW MEXICO STATE LINE

LOCATION.--Lat 36°59'51", long 108°11'17", in NW¼SE¼ sec.10, T.32 N., R.13 W., La Plata County, CO, Hydrologic Unit 14080105, on right bank at Colorado-New Mexico State line, 0.2 mi downstream from Ponds Arroyo, and 4.8 mi north of La Plata, NM.

DRAINAGE AREA.--331 mi².

PERIOD OF RECORD.--January 1920 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 1313: 1934(M), 1936(M).

GAGE.--Water-stage recorder. Datum of gage is 5,975.15 ft above National Geodetic Vertical Datum of 1929. See WSP 1713 or 1733 for history of changes prior to Mar. 17, 1934.

REMARKS.--Estimated daily discharges: Dec. 9, 10, 13, 14, 16, 17, 21, 22, Dec. 26 to Jan. 18, and Jan 22-30. Records good except for estimated daily discharges. which are fair. Diversions upstream from station for irrigation of about 15,000 acres, mostly upstream from station.

COOPERATION.--Records collected and computed by Colorado Division of Water Resources and reviewed by Geological Survey.

AVERAGE DISCHARGE.--68 years, 36.5 ft³/s; 26,440 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,750 ft³/s, Aug. 24, 1927, gage height, 11.36 ft, present datum, from rating curve extended above 750 ft³/s, on basis of slope-area measurement of peak flow; no flow at times in many years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 246 ft³/s at 0415 Nov. 6, gage height, 3.93 ft, maximum gage height, 6.32 ft at 0015 Jan. 2 (backwater from ice); minimum daily discharge, 4.6 ft³/s, July 30.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	33	27	22	28	61	46	55	56	31	4.7	21
2	9.6	37	27	18	30	66	42	60	40	27	8.9	20
3	9.5	33	26	19	32	53	37	54	42	27	7.1	18
4	9.1	29	26	20	31	50	36	44	62	48	6.0	19
5	8.9	29	26	26	31	49	34	41	69	30	6.5	21
6	8.9	103	25	26	32	47	33	42	87	24	9.4	17
7	11	72	24	22	31	49	49	45	76	20	19	15
8	9.1	54	24	22	30	40	57	44	84	19	16	13
9	9.4	41	22	22	30	42	57	40	83	17	13	11
10	8.9	35	22	22	30	49	48	35	74	21	10	9.3
11	10	33	24	24	30	45	42	33	81	26	9.1	7.8
12	10	31	24	20	31	43	35	37	67	20	8.8	11
13	13	29	22	20	30	45	30	52	51	13	9.5	37
14	15	33	20	20	29	41	28	76	43	8.3	9.3	28
15	16	35	20	22	28	44	33	93	43	6.7	8.9	27
16	14	32	20	24	30	42	56	83	42	7.4	10	24
17	14	30	24	22	29	38	91	89	37	7.5	19	20
18	15	30	26	22	28	36	67	69	35	6.6	15	15
19	13	29	26	23	28	38	53	34	32	4.9	13	14
20	13	28	26	23	28	39	45	33	35	5.9	10	13
21	13	27	24	23	29	39	42	70	33	7.9	9.0	13
22	14	30	24	20	31	40	44	60	31	5.6	10	16
23	13	30	26	19	30	41	44	59	32	5.9	10	14
24	15	28	25	16	28	43	52	66	38	8.2	11	11
25	18	28	26	18	29	38	51	65	37	7.4	11	9.0
26	15	30	26	22	30	37	45	63	42	5.9	13	6.4
27	16	28	26	26	32	41	36	65	40	5.4	12	6.3
28	15	28	24	28	35	57	31	74	48	5.4	24	6.8
29	17	28	26	28	38	59	33	75	64	5.3	25	7.6
30	28	27	24	30	---	61	38	91	63	4.6	20	8.4
31	27	---	22	23	---	57	---	79	---	4.8	23	---
TOTAL	420.4	1060	754	695	878	1430	1335	1931	1568	436.7	381.7	459.6
MEAN	13.6	35.3	24.3	22.4	30.3	46.1	44.5	62.3	52.3	14.1	12.3	15.3
MAX	28	103	27	30	38	66	91	93	87	48	25	37
MIN	8.9	27	20	16	28	36	28	33	31	4.6	4.7	6.3
AC-FT	834	2100	1500	1380	1740	2840	2650	3830	3110	866	757	912

CAL YR 1987 TOTAL 27278.0 MEAN 74.7 MAX 571 MIN 8.6 AC-FT 54110
WTR YR 1988 TOTAL 11349.4 MEAN 31.0 MAX 103 MIN 4.6 AC-FT 22510

09371000 MANCOS RIVER NEAR TOWAOC, CO

LOCATION.--Lat 37°01'39", long 108°44'27", Ute Indian Reservation, Montezuma County, Hydrologic Unit 14080107, on left bank 700 ft upstream from bridge on U.S. Highway 666, 2.0 mi north of Colorado-New Mexico State line, 6.0 mi upstream from Aztec Creek, and 12 mi south of Towaoc.

DRAINAGE AREA.--526 mi².

PERIOD OF RECORD.--Streamflow records, October 1920 to September 1943, February 1951 to current year. Monthly discharge only for some periods, published in WSP 1313. Water-quality data available, August 1969 to June 1972, October 1983 to current year. Sediment data available, April to December 1961.

REVISED RECORDS.--WSP 1733: 1924 (monthly figures only). WDR CO-83-3: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 5,055.98 ft above National Geodetic Vertical Datum of 1929. See WSP 1713 or 1733 for history of changes prior to Mar. 11, 1954.

REMARKS.--Estimated daily discharges: Nov. 26-27, Nov. 29 to Dec 8, Dec. 11-12, 14-20, and Dec. 22 to Feb. 24. Records good except for flows above 600 ft³/s which are fair and those for estimated daily discharges, which are poor. Diversions for irrigation of about 10,000 acres upstream from station. One diversion upstream from station for irrigation of about 100 acres downstream from station. Flow regulated by Jackson Gulch Reservoir, capacity, 10,000 acre-ft since March 1949.

AVERAGE DISCHARGE.--60 years, 54.3 ft³/s; 39,340 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,300 ft³/s, Oct. 14, 1941, gage height, 7.30 ft, present site and datum, from rating curve extended above 200 ft³/s, on basis of slope-area measurement of peak flow; maximum gage height, 8.50 ft, Sept. 6, 1970; no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 700 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Nov. 6	[illegible]	750	4.20	Aug. 31	0200	730	4.[illegible]
Aug. 7	[illegible]	*1,350	*5.18				

Minimum daily discharge, 0.34 ft³/s, July 21.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	70	24	14	24	112	[illegible]	[illegible]	[illegible]	33	15	[illegible]
2	9.7	117	24	14	28	38	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
3	8.8	61	26	13	34	60	[illegible]	73	14	[illegible]	[illegible]	[illegible]
4	7.6	41	30	13	26	[illegible]	34	62	8.7	[illegible]	[illegible]	50
5	6.4	36	32	13	23	43	30	50	[illegible]	24	[illegible]	45
6	5.2	444	30	14	17	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	11	41
7	4.8	127	[illegible]	14	[illegible]	[illegible]	39	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
8	5.3	100	28	13	[illegible]	[illegible]	39	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
9	5.0	76	28	13	[illegible]	[illegible]	66	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
10	4.5	62	27	13	18	[illegible]	63	[illegible]	[illegible]	[illegible]	19	16
11	4.6	56	26	13	19	37	[illegible]	[illegible]	[illegible]	18	11	26
12	4.8	52	24	13	20	32	47	5.8	[illegible]	16	14	24
13	6.1	50	20	13	22	30	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	132
14	25	49	16	13	24	28	[illegible]	17	[illegible]	[illegible]	[illegible]	[illegible]
15	76	52	15	14	[illegible]	27	[illegible]	17	11	[illegible]	[illegible]	60
16	37	51	15	14	[illegible]	33	78	75	3.3	[illegible]	5.2	43
17	27	41	18	14	[illegible]	23	130	120	[illegible]	4.4	[illegible]	[illegible]
18	23	38	22	14	19	24	121	186	6.4	3.7	[illegible]	[illegible]
19	20	30	22	14	17	23	36	234	6.7	[illegible]	[illegible]	[illegible]
20	19	33	22	14	17	25	69	150	5.5	1.3	[illegible]	[illegible]
21	19	40	21	14	22	27	61	88	6.4	.34	11	28
22	18	37	20	14	29	31	64	51	3.7	1.9	40	30
23	19	34	20	14	36	36	76	38	3.7	4.8	61	34
24	19	33	20	14	44	37	92	34	[illegible]	4.1	31	[illegible]
25	22	33	20	14	55	36	98	30	[illegible]	[illegible]	[illegible]	[illegible]
26	34	32	17	15	65	34	104	30	3.8	6.5	35	[illegible]
27	33	30	15	15	68	40	112	26	9.9	9.0	[illegible]	[illegible]
28	25	28	15	17	96	56	88	26	45	6.2	[illegible]	[illegible]
29	23	28	15	19	139	63	75	26	76	5.[illegible]	141	26
30	157	26	15	20	---	46	78	32	45	11	40	24
31	74	---	15	22	---	44	---	43	---	11	141	---
TOTAL	754.4	1907	672	448	970	1289	2052	1786.3	545.0	445.64	1334.0	1394
MEAN	24.3	63.6	21.7	14.5	33.4	41.6	68.4	57.6	18.2	14.4	43.0	46.5
MAX	157	444	32	22	139	112	136	234	76	48	223	132
MIN	4.5	26	15	12	15	23	32	5.8	2.0	.34	5.2	16
AC-FT	1500	3780	1330	889	1920	2560	4070	3540	1080	884	2650	2760

CAL YR 1987 TOTAL 38368.8 MEAN 105 MAX 525 MIN 4.5 AC-FT 76100
WTR YR 1988 TOTAL 13597.84 MEAN 37.2 MAX 444 MIN .34 AC-FT 26970

09371002 NAVAJO WASH NEAR TOWAOC, CO

LOCATION.--Lat 37°12'03", long 108°41'50", Ute Mountain Ute Indian Reservation, Montezuma County, Hydrologic Unit 14080107, on left bank 150 ft upstream from Towaoc Road crossing, 0.2 mi downstream from Ismay Draw and 1.6 mi east of Towaoc, Co.

DRAINAGE AREA.--26.3 mi².

PERIOD OF RECORD.--October 1986 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 5,600 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Sept. 30, 1986, (fragmentary) USBR operated staff gage or water-stage recorder at same site and datum.

REMARKS.--Estimated daily discharges: Oct. 5-29, Nov. 18-25, 28-29, Dec. 11-21, Dec. 25 to Jan. 10, Jan. 15-27, 30-31, Feb. 2-19, Apr. 1-13, May 2-6, and July 12 to Sept. 30. Records fair except for estimated daily discharges, and flows above 30 ft³/s, which are poor. Flow regulated by Montezuma Valley Irrigation District through series of canals and ditches from Dolores Project. Most of water is return flow. Diversions from Dolores River basin to San Juan River basin for irrigation of about 2450 acres upstream from station. No diversions upstream for irrigation downstream from station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 165 ft³/s, Nov. 6, 1987, gage height, 2.76 ft, from rating curve extended above 62 ft³/s; minimum daily, 0.47 ft³/s, Mar. 28, 1988.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 165 ft³/s at 0100 Nov. 6, gage height, 2.76 ft; minimum daily, 0.47 ft³/s, Mar. 28.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	[illegible]	2.5	1.1	2.2	2.7	4.6	9.4	18	19	17	22
2	[illegible]	[illegible]	2.3	1.0	[illegible]	2.7	4.5	9.5	15	19	20	19
3	[illegible]	[illegible]	2.2	1.0	2.2	[illegible]	4.6	9.6	15	19	16	17
4	[illegible]	[illegible]	2.6	.95	2.0	3.0	[illegible]	9.5	13	22	13	16
5	[illegible]	[illegible]	3.0	1.0	1.9	7.0	3.8	8.0	11	20	12	14
6	[illegible]	60	2.9	1.0	1.9	9.2	5.0	11	11	15	17	13
7	[illegible]	[illegible]	2.2	1.0	2.0	9.2	3.2	17	9.2	12	40	12
8	[illegible]	[illegible]	[illegible]	1.0	2.2	11	3.6	23	8.3	11	30	11
9	[illegible]	[illegible]	1.8	1.0	2.4	9.6	3.6	22	10	14	20	11
10	[illegible]	[illegible]	1.7	1.0	2.4	7.6	[illegible]	12	13	13	17	10
11	[illegible]	17	1.6	1.0	2.6	[illegible]	4.4	8.0	11	9.6	17	14
12	[illegible]	16	1.4	.96	2.3	1.5	4.0	7.4	13	9.5	16	28
13	[illegible]	[illegible]	1.4	1.0	2.4	1.4	3.4	13	12	9.5	16	46
14	[illegible]	[illegible]	1.3	.82	2.8	1.1	2.4	12	9.6	10	15	36
15	38	17	1.3	.90	3.0	.96	3.7	9.2	9.6	9.5	14	26
16	[illegible]	17	[illegible]	.90	2.8	.83	10	8.4	18	12	16	22
17	[illegible]	14	1.6	.90	2.6	.59	9.2	9.5	23	14	14	20
18	[illegible]	13	1.8	.90	2.4	.82	11	12	22	12	13	19
19	[illegible]	13	1.6	.90	2.2	.80	13	22	24	9.5	13	19
20	13	12	1.6	.90	3.0	.59	12	21	19	7.5	14	19
21	17	10	1.6	.95	3.6	.69	17	21	17	7.5	15	19
22	[illegible]	[illegible]	1.6	.95	4.2	.80	18	20	17	8.0	15	18
23	[illegible]	4.8	1.8	.90	3.7	.68	16	17	19	9.0	14	16
24	23	3.2	1.8	.90	3.4	.75	13	17	18	10	16	15
25	[illegible]	2.8	1.6	.90	3.1	.68	13	17	17	11	15	15
26	26	2.9	1.4	.90	3.4	.61	10	15	20	12	17	15
27	[illegible]	2.8	1.2	.90	3.4	.61	8.9	13	21	10	18	15
28	40	2.4	1.2	.86	3.9	.47	14	14	24	10	22	14
29	[illegible]	2.4	1.2	.89	3.4	1.6	15	14	24	9.5	20	14
30	[illegible]	2.5	1.2	2.0	---	6.0	17	17	21	10	36	14
31	36	---	1.1	2.2	---	4.6	---	19	---	12	32	---
TOTAL	630	461.3	53.8	31.63	81.1	95.15	256.4	436.9	482.7	376.1	570	549
MEAN	20.3	15.4	1.74	1.02	2.80	3.07	8.55	14.1	16.1	12.1	18.4	18.3
MAX	45	60	3.0	2.2	4.2	11	18	23	24	22	40	46
MIN	12	2.4	1.1	.82	1.9	.47	2.4	7.4	8.3	7.5	12	10
AC-FT	1250	915	107	63	161	189	509	867	957	746	1130	1090

CAL YR 1987 TOTAL 4331.2 MEAN 11.9 MAX 60 MIN 1.0 AC-FT 8590
WTR YR 1988 TOTAL 4024.08 MEAN 11.0 MAX 60 MIN .47 AC-FT 7980

SAN JUAN RIVER BASIN

09371500 McELMO CREEK NEAR CORTEZ, CO

LOCATION.--Lat 37°19'23", long 108°40'22", in NE¼ sec.1, T.35N., R.71 W., Montezuma County, Hydrologic Unit 14080202, on left bank 150 ft downstream from mouth of Mud Creek, and 4 mi southwest of Cortez.

DRAINAGE AREA.--230 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1926 to September 1929, April 1940 to September 1945, October 1950 to September 1954 (monthly discharge only for some periods, published in WSP 1313), January 1982 to current year.

REVISED RECORDS.--WSP 1313: 1927, 1927 (M).

GAGE.--Water-stage recorder. Elevation of gage is 5,700 ft above National Geodetic Vertical Datum of 1929, by barometer. Prior to Sept. 30, 1929, at site 3 mi downstream at different datum. Mar. 29, 1940 to Nov. 2, 1941, at site 150 ft upstream at datum 4.20 ft, higher. Nov. 3, 1941 to Sept. 30, 1945, at present site at datum 4.00 ft, higher. Oct. 1, 1950 to Sept. 30, 1954, at present site at datum 2.50 ft, higher, Jan. 1, 1982, to present, at former site at same datum.

REMARKS.--Estimated daily discharges: Oct. 25-26, Oct. 30 to Nov. 1, Nov. 28-29, Dec. 2, Dec. 13-23, Dec. 25 to Feb. 1, Feb. 5-17, and Sept. 14-27. Records good except for those above 150 ft^3/s, which are fair, and estimated daily discharges, which are poor. Diversions for irrigation of about 200 acres upstream from station. Flow is mainly return flows from irrigated lands for Montezuma Irrigation District (water imported from Dolores River basin).

AVERAGE DISCHARGE.--18 years (water years 1927-29, 1941-45, 1951-54, 1983-88), 56.7 ft^3/s; 41,080 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,560 ft^3/s, Sept. 9, 1927, gage height, 6.45 ft, from rating curve extended above 240 ft^3/s, on basis of slope-area measurement at gage height, 5.72 ft; minimum not determined.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 692 ft^3/s at 1000 Nov. 6, gage height, 6.07 ft; minimum daily, 22 ft^3/s, Mar. 29-30.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	52	150	47	30	40	53	25	42	79	119	113	79
2	52	173	48	28	47	42	25	41	71	121	97	79
3	54	105	49	26	53	34	24	44	70	119	85	92
4	58	93	48	24	49	31	23	43	72	146	75	84
5	63	88	53	26	38	30	33	42	75	131	78	81
6	65	307	52	28	34	30	25	45	74	111	89	78
7	65	162	49	26	36	30	29	54	69	94	218	79
8	56	119	49	26	36	27	23	54	60	86	124	81
9	54	99	45	26	40	28	26	52	70	83	99	71
10	55	93	45	26	44	29	28	47	69	89	95	74
11	48	91	45	26	46	29	28	55	75	91	97	101
12	44	87	40	26	48	30	27	61	88	81	97	275
13	67	88	40	26	55	28	27	52	82	75	89	236
14	116	92	38	26	65	26	27	50	82	73	79	170
15	94	100	40	26	50	29	35	44	83	73	75	130
16	84	92	42	26	55	30	50	40	74	83	82	110
17	70	91	44	26	50	30	60	39	79	82	84	95
18	68	78	50	25	47	27	42	60	77	77	85	90
19	66	79	48	26	45	28	36	107	65	63	88	90
20	61	82	44	26	51	27	30	83	64	58	84	90
21	60	82	40	28	67	26	32	72	67	62	85	90
22	60	72	44	29	78	24	62	66	66	62	100	90
23	61	67	44	26	76	24	77	60	64	62	88	80
24	70	65	45	26	70	24	76	55	68	69	96	70
25	120	52	38	26	69	23	63	53	82	70	94	70
26	95	55	32	26	70	23	60	59	88	69	99	75
27	73	49	32	28	71	24	53	63	120	66	108	75
28	71	48	32	30	93	24	50	64	171	60	108	67
29	70	48	32	32	79	22	41	63	183	60	115	65
30	170	48	30	36	---	22	42	83	130	64	136	65
31	130	---	30	38	---	23	---	88	---	65	100	---
TOTAL	2272	2855	1315	850	1602	877	1184	1781	2526	2568	3069	2972
MEAN	73.3	95.2	42.4	27.4	55.2	28.3	39.5	57.5	84.2	82.8	99.0	99.1
MAX	170	307	53	38	93	53	77	107	183	146	218	275
MIN	44	48	30	24	34	22	23	39	60	58	75	65
AC-FT	4510	5660	2610	1690	3180	1740	2350	3530	5010	5090	6090	5890

CAL YR 1987 TOTAL 25798 MEAN 70.7 MAX 420 MIN 22 AC-FT 51170
WTR YR 1988 TOTAL 23871 MEAN 65.2 MAX 307 MIN 22 AC-FT 47350

09371500 McELMO CREEK NEAR CORTEZ, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Jan. 1, 1982 to current year. Water-quality analysis since August 1987.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Feb. 6, 1982 to current year.
WATER TEMPERATURES: Feb. 6, 1982 to current year.

INSTRUMENTATION.--Water-quality monitor since January 1982.

REMARKS.--Stream is not well mixed at location of monitor. Specific conductance readings from the monitor were adjusted to represent average specific conductance of stream cross section at this location. Daily maximum and minimum specific conductance data available in district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum 4,180 microsiemens Jan. 31, 1985; minimum, 785 microsiemens Aug. 30, 1988.
WATER TEMPERATURES: Maximum 26.5°C July 18-19 1985; minimum, 0.0°C many days during winter months.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Ma[illegible] 4,030 microsiemens Jan. 2; minimum, 785 microsiemens Aug. 30.
WATER TEMPERATURES: Maxim[illegible] 3°C June 23; minimum 0.0°C, many days during November through February.

WATER QUAL[illegible] DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO
OCT											
27...	1530	74	1960	8.1	10.0	1100	970	240	120	100	1
NOV											
24...	1230	60	2230	8.1	2.0	1100	830	240	120	120	2
DEC											
16...	1350	41	2360	8.0	0.0	1400	1200	300	170	170	2
JAN											
26...	[illegible]	25	3140	8.1	0.0	1900	1500	380	230	260	3
FEB											
23...	1215	61	2210	7.0	1.5	1300	1200	250	170	230	3
MAR											
29...	[illegible]	20	3520	8.2	8.0	2000	1700	370	260	270	3
APR											
26...	1500	60	1950	8.2	14.5	860	670	180	100	110	2
MAY											
26...	1240	63	1610	8.0	17.0	950	930	200	110	100	1
JUN											
23...	1230	70	1510	8.2	22.0	800	570	180	85	80	1
JUL											
25...	1400	87	1530	8.1	21.0	790	570	180	83	72	1
AUG											
30...	1300	102	1660	7.3	19.0	870	640	200	90	79	1
SEP											
28...	1230	70	1770	7.0	11.5	1000	310	220	120	110	2

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)
OCT										
27...	4.6	128	1100	26	0.40	10	1680	2.29	336	1.30
NOV										
24...	3.4	265	1200	27	0.40	11	1890	2.57	306	1.90
DEC										
16...	3.8	237	1900	37	0.40	13	2730	3.79	308	2.70
JAN										
26...	4.0	352	2100	55	0.40	13	3280	4.46	225	5.80
FEB										
23...	5.6	132	--	35	0.40	9.4	--	--	--	4.00
MAR										
29...	4.9	268	2100	52	0.40	7.8	3260	4.43	178	6.70
APR										
26...	3.4	190	1000	23	0.30	6.2	1550	2.10	252	2.20
MAY										
26...	5.4	23	920	22	0.40	12	1390	1.89	237	1.80
JUN										
23...	3.4	232	720	15	0.40	12	1240	1.69	234	1.20
JUL										
25...	3.6	227	700	14	0.30	10	1200	1.64	283	1.00
AUG										
30...	4.0	227	770	16	0.30	11	1310	1.78	360	--
SEP										
28...	3.9	235	980	21	0.40	11	1610	2.19	305	0.92

09371500 McELMO CREEK NEAR CORTEZ, CO--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	2220	2910	3720	2750	2660	3490	2330	1620	1370	1850	1700
2	---	2210	3040	3860	2700	2780	3470	2120	1660	1310	1570	1680
3	---	2210	3080	3580	2660	2860	3460	2080	1630	1300	1590	1690
4	---	2180	3180	3660	2630	2950	3470	2010	1620	1330	1570	1700
5	---	2150	3250	3510	2700	2990	2750	1900	1570	1290	1580	1750
6	---	2080	3330	3440	2710	2960	3070	1980	1490	1330	1580	1730
7	---	2190	3340	3520	2650	2940	3200	1870	1390	1390	1720	1770
8	---	2190	3400	3650	2550	3000	3070	1750	1440	1400	1610	1760
9	---	2150	3380	3590	---	3050	3030	1770	1470	1350	1600	1800
10	---	2140	3430	3600	---	3070	2830	1730	1510	1290	1570	1790
11	---	2130	3510	3540	---	3090	2760	1620	1490	1320	1590	1800
12	---	2140	3390	3580	---	3260	2550	1550	1450	1360	1590	1930
13	---	2160	3380	3620	---	3180	2780	1520	1440	1480	1640	1980
14	---	2160	3510	3000	---	3140	2680	1660	1440	1500	1650	1870
15	---	2190	3460	3160	2650	3150	2870	1600	1400	1520	1640	1840
16	---	2170	2910	3520	2630	3080	3190	1570	1370	1480	1610	1820
17	---	2140	3700	3230	2600	3030	3330	1610	1400	1500	1650	1810
18	---	2170	3760	3060	2590	3130	3000	1670	1420	1500	1670	1770
19	---	2110	3750	3040	2670	3090	2830	1850	1370	1540	1730	1650
20	---	2080	3790	3050	2560	3120	2790	1710	1350	1570	1680	1620
21	---	2100	3470	3080	2360	3270	2740	1570	1420	1550	1680	1620
22	---	2180	3460	3160	2300	3380	2290	1540	1410	1540	1700	1790
23	---	2290	3720	3160	2260	3440	2170	1540	1480	1540	1730	1790
24	---	2250	3670	3060	2310	3440	2050	1600	1410	1520	1820	1760
25	---	2400	3560	3050	2320	3450	1890	1630	1360	1480	1790	1740
26	---	2570	3600	3110	2340	3480	1910	1690	1360	1470	1760	1720
27	---	2650	3730	3100	2410	3430	2030	1700	1360	1500	1670	1730
28	2030	2730	3740	3080	2360	3480	2060	1670	1560	1550	1720	1790
29	2150	2820	3620	3060	2450	3540	2270	1700	1570	1570	1590	1820
30	2300	2790	3510	2880	---	3660	2250	1670	1450	1570	1580	1820
31	2220	---	3390	2750	---	3590	---	1600	---	1620	1720	---
MEAN	---	2260	3450	3300	---	3180	2740	1740	1460	1450	1660	1770

09371500 McELMO CREEK NEAR CORTEZ, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	10.2	9.0	.3	.0	.4	.0	.2	.0	8.6	3.8
2	---	---	9.6	8.6	.6	.0	.1	.0	.2	.0	7.1	3.4
3	---	---	11.4	8.4	2.1	.0	.0	.0	.2	.0	6.9	1.8
4	---	---	10.3	7.1	3.3	.0	.0	.0	.1	.0	8.6	1.9
5	---	---	9.8	7.5	4.7	2.2	.1	.0	.1	.0	7.9	1.9
6	---	---	9.4	8.1	4.2	1.5	.1	.0	.1	.0	8.3	1.9
7	---	---	8.6	7.2	4.1	.9	.1	.0	.1	.0	7.8	3.6
8	---	---	8.0	5.5	2.5	.7	.1	.0	.2	.0	7.2	.5
9	---	---	7.9	4.9	2.1	.0	.0	.0	.2	.0	8.7	1.0
10	---	---	7.1	4.8	3.2	.0	.1	.0	.3	.0	6.1	3.1
11	---	---	6.6	4.0	3.4	.4	.1	.0	.3	.0	7.4	.7
12	---	---	6.3	3.4	.8	.0	.1	.0	.5	.0	4.6	.1
13	---	---	6.2	3.1	.0	.0	.1	.0	.6	.0	6.2	.1
14	---	---	7.0	6.0	.0	.0	.2	.0	.5	.0	6.8	.1
15	---	---	5.8	3.6	.0	.0	.1	.0	.9	.0	8.9	.7
16	---	---	3.7	1.7	.0	.0	.1	.0	1.4	.0	6.2	3.6
17	---	---	3.3	1.2	.2	.0	.2	.0	1.0	.0	8.3	1.0
18	---	---	2.5	.0	.2	.0	.2	.0	.4	.0	9.1	.2
19	---	---	2.4	.0	1.6	.1	.2	.0	1.3	.0	10.6	1.2
20	---	---	3.3	.0	2.3	.0	.1	.0	1.9	.0	12.6	2.5
21	---	---	3.5	.7	.1	.0	.1	.0	2.0	.0	13.5	3.2
22	---	---	3.4	.2	.3	.0	.1	.0	3.4	.0	13.9	4.7
23	---	---	3.1	.3	1.4	.0	.1	.0	4.3	.0	14.7	5.1
24	---	---	2.8	.2	.6	.0	.2	.0	5.1	.0	13.7	5.8
25	---	---	3.4	.0	.1	.0	.2	.1	5.7	.4	14.3	3.6
26	---	---	3.0	1.0	.0	.0	.1	.0	5.7	1.1	16.6	5.2
27	---	---	1.3	.0	.0	.0	.2	.1	6.3	3.1	17.0	6.3
28	11.3	7.8	.3	.0	.2	.0	.4	.2	8.6	3.7	12.0	4.9
29	9.4	8.1	.3	.0	.3	.0	.4	.2	7.6	3.1	9.6	.7
30	9.3	8.0	.3	.0	.0	.0	.4	.0	---	---	7.3	3.4
31	9.0	6.5	---	---	.0	.0	.1	.0	---	---	6.1	3.0
MONTH	---	---	11.4	.0	4.7	.0	.4	.0	8.6	.0	17.0	.1

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	11.1	1.6	13.5	8.5	18.4	10.1	22.8	16.9	22.6	17.5	20.8	15.3
2	13.0	3.2	14.1	5.2	20.2	12.2	23.7	17.6	22.4	18.5	20.6	15.5
3	13.4	4.1	16.1	6.1	22.0	13.6	22.6	17.9	24.4	17.9	20.7	15.7
4	12.1	5.7	18.0	8.8	22.2	15.6	22.4	17.7	24.0	17.7	20.6	15.6
5	13.2	5.3	14.8	8.8	22.5	17.0	21.1	17.5	23.3	17.3	20.7	15.1
6	15.9	5.5	14.6	8.0	22.4	15.1	22.9	17.1	23.1	18.6	20.1	14.1
7	15.4	6.7	13.0	6.0	21.7	14.1	23.6	17.1	21.2	17.2	19.7	13.9
8	16.1	7.6	15.1	7.3	22.1	13.5	24.2	17.6	22.5	16.8	20.0	14.0
9	14.1	5.7	16.3	7.3	21.9	13.7	23.0	18.7	22.0	15.5	19.8	13.8
10	13.6	4.1	18.5	8.9	20.3	15.5	23.6	16.7	21.0	15.6	19.7	15.9
11	14.9	4.7	18.7	9.4	19.2	15.4	23.9	16.9	21.8	15.6	17.6	15.2
12	16.6	6.2	19.3	10.4	20.1	13.2	24.7	18.0	22.5	17.1	16.2	13.0
13	16.7	7.9	19.7	10.9	20.3	15.0	24.3	16.7	22.6	16.2	16.5	12.9
14	12.8	9.6	20.9	12.5	20.6	13.6	22.0	17.6	23.0	15.9	16.0	11.9
15	15.5	8.4	21.4	12.1	22.0	14.9	22.0	17.7	21.9	17.7	16.8	12.2
16	11.9	9.3	22.1	12.7	23.0	15.4	23.6	16.2	21.3	17.8	17.0	11.7
17	12.6	7.6	19.9	15.3	21.9	16.1	23.0	16.9	21.9	17.3	17.0	12.2
18	11.6	8.1	17.7	13.3	23.7	17.5	24.0	16.8	22.1	17.1	17.8	13.9
19	15.3	7.6	16.1	12.2	25.3	17.5	24.2	16.6	21.9	16.5	15.2	10.0
20	15.4	9.0	17.4	10.4	24.4	17.6	24.3	18.1	23.4	17.7	16.2	10.3
21	11.9	7.9	18.0	10.0	25.1	17.1	24.8	17.7	20.9	18.5	17.2	13.9
22	8.9	6.4	18.7	10.7	23.8	17.9	24.6	17.4	24.1	18.2	16.8	12.7
23	10.9	5.9	19.5	10.9	26.3	19.0	24.2	17.3	23.5	18.1	16.0	10.6
24	10.8	6.4	20.7	11.6	24.0	19.4	22.0	18.7	22.1	18.6	16.0	10.4
25	15.1	6.9	19.6	12.8	23.7	17.4	21.6	16.9	23.4	18.4	15.8	10.3
26	15.4	7.9	20.3	12.8	21.9	17.2	21.3	15.8	21.8	17.6	15.0	10.4
27	17.0	7.9	20.2	13.7	21.1	18.0	23.7	17.2	21.8	17.9	16.7	12.0
28	14.6	9.7	21.7	13.9	19.0	18.1	23.5	17.1	21.5	17.1	14.4	10.0
29	19.0	9.7	19.2	13.4	18.8	17.1	21.7	17.4	21.1	16.3	13.5	8.1
30	18.5	10.1	14.7	11.3	22.3	15.9	23.1	18.0	21.9	14.6	14.9	9.2
31	---	---	15.8	8.9	---	---	22.3	17.6	19.3	16.2	---	---
MONTH	19.0	1.6	22.1	5.2	26.3	10.1	24.8	15.8	24.4	14.6	20.8	8.1

09372000 McELMO CREEK NEAR COLORADO-UTAH STATE LINE

LOCATION.--Lat 37°19'27", long 109°00'54", in NE¼ sec.2, T.35 N., R.20 W., Montezuma County, Hydrologic Unit 14080202, on right bank 1.5 mi upstream from Colorado-Utah State line, 2.0 mi upstream from Yellowjacket Creek, and 2.0 mi west of former town of McElmo.

DRAINAGE AREA.--346 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Streamflow records, March 1951 to current year. Water-quality data available, November 1977 to September 1981, and August 1987 to current year.

REVISED RECORDS.--WSP 1925: 1951-52 (M), 1957 (M). WRD CO-1972: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 4,890 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 6-23, Dec. 15, 17, 19-20, 23, 26-27, 29-31, Jan. 3-13, Jan. 15-20, and Jan. 24-28. Records good except for those above 200 ft³/s, which are fair, and estimated daily discharges, which are poor. Diversions for irrigation of about 1,780 acres upstream from station. One diversion upstream from station for irrigation of about 60 acres downstream from station. Part of flow is return water from irrigated lands of Montezuma Irrigation District (water imported from Dolores River basin). Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--37 years, 49.4 ft³/s; 35,790 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,040 ft³/s, Aug. 7, 1967, gage height, 7.58 ft, from floodmark in gage well, from rating curve extended above 2,100 ft³/s; maximum gage height, 8.13 ft, Sept. 6, 1970; minimum daily discharge, 0.08 ft³/s, Sept. 9-10, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 620 ft³/s, and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Nov. 6	0300	*1,120	*6.25	Aug. 30	2100	790	5.71
June 28	2100	805	5.74	Sept. 12	1200	760	5.65

Minimum daily discharge, 19 ft³/s, Apr. 13.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	55	174	53	34	46	77	30	34	76	130	90	105
2	55	210	54	31	59	67	29	35	67	128	104	97
3	53	144	56	30	81	56	29	33	62	121	77	88
4	59	113	56	28	54	49	27	34	63	129	67	86
5	60	164	60	30	40	43	23	29	67	126	61	76
6	65	400	62	32	37	43	33	29	64	109	68	67
7	62	210	56	30	39	43	20	36	58	89	255	64
8	61	150	56	30	39	42	23	47	56	72	161	56
9	56	130	50	30	43	39	22	44	56	64	97	56
10	56	120	49	30	48	39	28	36	52	71	86	54
11	65	110	50	30	49	40	29	32	60	75	87	79
12	48	110	45	30	51	40	23	41	85	64	84	228
13	62	120	43	30	56	37	19	42	75	52	81	373
14	128	120	43	29	71	35	20	39	68	54	76	166
15	125	130	42	30	56	36	24	39	71	50	68	135
16	94	120	45	30	61	39	47	33	71	54	87	120
17	88	110	48	30	56	40	63	25	64	73	70	104
18	84	100	56	30	50	36	49	49	70	67	68	102
19	80	100	55	30	45	35	33	87	62	52	68	98
20	78	100	50	30	44	35	29	81	58	42	68	99
21	72	100	49	32	57	35	25	64	49	42	79	99
22	70	90	49	31	71	33	37	61	44	43	79	96
23	70	85	50	30	79	31	54	46	51	46	72	83
24	78	83	53	30	76	30	63	34	50	53	82	78
25	142	65	43	28	76	30	54	34	64	58	81	77
26	111	67	38	30	79	29	44	34	79	61	87	79
27	89	61	36	30	75	29	40	36	79	52	94	79
28	84	56	37	32	95	28	42	46	251	50	112	76
29	87	56	36	37	99	27	36	63	208	49	102	73
30	217	56	34	42	---	28	32	70	179	50	184	74
31	131	---	34	43	---	28	---	82	---	56	143	---
TOTAL	2585	3654	1488	969	1732	1199	1027	1395	2359	2182	2938	3067
MEAN	83.4	122	48.0	31.3	59.7	38.7	34.2	45.0	78.6	70.4	94.8	102
MAX	217	400	62	43	99	77	63	87	251	130	255	373
MIN	48	56	34	28	37	27	19	25	44	42	61	54
AC-FT	5130	7250	2950	1920	3440	2380	2040	2770	4680	4330	5830	6080

CAL YR 1987 TOTAL 25751 MEAN 70.6 MAX 420 MIN 22 AC-FT 51080
WTR YR 1988 TOTAL 24595 MEAN 67.2 MAX 400 MIN 19 AC-FT 48780

09372000 MCELMO CREEK NEAR COLORADO-UTAH STATE LINE CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical analyses: November 1977 to September 1981, August 1987 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO
OCT 27...	1020	92	2170	8.0	10.0	1100	900	230	120	120	2
NOV 24...	1115	88	2400	8.0	2.0	1100	870	240	130	140	2
DEC 16...	1300	45	3080	8.0	0.0	1600	1300	310	190	210	2
JAN 26...	1050	26	3300	8.1	0.0	1800	1500	370	210	220	2
FEB 23...	1035	97	2320	7.5	1.5	1300	1200	260	160	210	3
MAR 29...	1050	26	3330	8.1	6.0	1800	1600	330	240	240	3
APR 26...	1330	47	2150	7.9	15.0	990	760	200	120	150	2
MAY 26...	1100	37	2330	7.8	18.0	1000	760	220	120	150	2
JUN 23...	1030	51	1880	8.4	22.0	950	690	200	110	110	2
JUL 25...	1150	59	1910	8.0	22.5	980	710	210	110	110	2
AUG 30...	1040	84	1750	7.3	19.5	830	610	180	93	91	1
SEP 28...	1030	75	1800	6.9	13.0	1000	770	220	110	92	1

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)
OCT 27...	4.8	166	1100	27	0.40	11	1720	2.34	427	1.10
NOV 24...	3.7	261	1300	32	0.40	12	2020	2.75	480	1.70
DEC 16...	4.1	300	2000	43	0.40	13	2960	4.03	360	2.90
JAN 26...	4.1	327	1900	84	0.40	14	3010	4.10	211	3.20
FEB 23...	5.4	153	1500	32	0.40	9.9	2280	3.10	597	2.70
MAR 29...	5.2	223	1900	5.0	0.40	3.1	2870	3.90	203	2.00
APR 26...	4.4	233	1100	28	0.40	11	1760	2.39	221	1.40
MAY 26...	6.2	283	1200	28	0.50	12	1910	2.60	191	1.10
JUN 23...	4.7	259	920	21	0.50	13	1540	2.09	210	0.71
JUL 25...	4.7	266	940	22	0.40	11	1570	2.14	249	0.72
AUG 30...	4.3	228	800	18	0.30	12	1340	1.82	303	--
SEP 28...	3.4	231	900	18	0.30	9.7	1500	2.04	303	1.40

TRANSMOUNTAIN DIVERSIONS FROM COLORADO RIVER BASIN IN COLORADO

There are 24 tunnels or ditches, all of which are equipped with water-stage recorders and Parshall flumes or sharp-crested weirs. Records provided by Colorado Division of Water Resources. The locations and diversions of 8 selected diversions are given in the following list.

09010000 Grand River ditch diverts water from tributaries of Colorado River to La Poudre Pass Creek (tributary to Cache la Poudre River) in NW¼ sec.21, T.6 N., R.75 W., in Platte River basin. Two collection ditches beginning at headgates located in sec.28, T.5 N., R.76 W., and sec.29, T.6 N., R.75 W., intercept all tributaries upstream on each side of the Colorado River and converge at La Poudre Pass.

REVISIONS (WATER YEARS).--WSP 1313: 1912-27.

09013000 Alva B. Adams tunnel diverts water from Grand Lake and Shadow Mountain Lake in NW¼ sec.9, T.3 N., R.75 W., in Colorado River basin, to Lake Estes (Big Thompson River) in sec.30, T.5 N., R.72 W., in Platte River basin. For daily discharge, see elsewhere in this report.

09021500 Berthoud Pass ditch diverts water from tributaries of Fraser River between headgate in sec.33, T.2 S., R.75 W., and Berthoud Pass, in Colorado River basin, to Hoop Creek (tributary to West Fork Clear Creek) in sec.10, T.3 S., R.75 W., in Platte River basin.

09042000 Hoosier Pass tunnel diverts water from tributaries of Blue River in Colorado River basin to Montgomery Reservoir (Middle Fork South Platte River) in sec.14, T.8 S., R.78 W., in Platte River basin; this water is again diverted to South Catamount Creek (tributary to Catamount Creek) in SE¼ sec.14, T.13 S., R.69 W., in the Arkansas River basin. Collection conduits extending from the right bank of Crystal Creek (tributary to Spruce Creek) in sec.14, T.7 S., R.78 W., right bank of Spruce Creek in sec.23, T.7 S., R.78 W., right bank of McCullough Gulch in sec.26, T.7 S., R.78 W., right bank of Monte Cristo Creek in SW¼NE¼ sec.2, T.8 S., R.78 W., left bank of Bemrose Creek in SW¼SW¼ sec.6, T.8 S., R.77 W., and intercepting intermediate tributaries, transport diversions to north portal of the tunnel.

REVISIONS (WATER YEARS).--WDR CO-86-1, WDR CO-86-2: 1984, 1985.

09050590 Harold D. Roberts tunnel diverts water from Dillon Reservoir (Blue River) in sec.18, T.5 S., R.77 W., in Blue River basin, to North Fork South Platte River (tributary to South Platte, River) in SW¼SW¼ sec.4, T.7 S., R.74 W., in Platte River basin. Figures include a small amount of ground-water inflow between Dillon Reservoir and east portal of tunnel.

09063700 Homestake tunnel diverts water from Homestake Lake (Middle Fork Homestake Creek), in sec.17, T.8 S., R.81 W., in Eagle River basin, to Lake Fork in sec.9, T.9 S., R.81 W., in Arkansas River basin. Water is imported to Homestake Lake from tributaries of Homestake Creek by collection conduits that extend from right bank of French Creek in sec.28, T.7 S., R.81 W., and left bank of East Fork Homestake Creek in sec.9, T.8 S., R.81 W., and intercept intermediate tributaries.

09077160 Charles H. Bousted tunnel diverts water from the main stem and tributaries of Fryingpan River (tributary to Roaring Fork River), in Colorado River basin, to Lake Fork in sec.10, T.9 S., R.81 W., in Arkansas River basin. Water is transported to west portal of tunnel (at lat 39°14'44", long 106°31'47"), by a series of collection conduits extending between headgates on right bank of Sawyer Creek at lat 39°15'58", long 106°38'19" and right bank of Fryingpan River at lat 39°14'40", long 106°31'49", and intercepting intermediate tributaries.

09077500 Busk-Ivanhoe tunnel diverts water from Ivanhoe Lake (Ivanhoe Creek), tributary to Fryingpan River in sec.13, T.9 S., R.82 W., in Roaring Fork River basin, to Busk Creek (tributary to Lake Fork) in sec. 20, T.9 S., R.81 W., in Arkansas River basin.

DIVERSIONS, IN ACRE-FEET, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

(SOME PREVIOUSLY UNPUBLISHED DIVERSIONS TO THE PLATTE AND ARKANSAS RIVER BASINS ARE INCLUDED IN THIS TABLE)

Diversion	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
TO PLATTE RIVER BASIN												
09010000	0	0	0	0	0	0	0	4,720	8,400	3,010	1,290	213
Water year 1987, 17,640												
09010000	0	0	0	0	0	0	0	1,090	12,580	4,210	980	196
Water year 1988, 19,050												
09013000	10,700	15,590	18,250	23,590	18,130	26,830	15,590	24,860	22,160	26,270	28,450	27,340
Water year 1988, 257.800												
09021500	0	0	0	0	0	0	0	0	474	236	.1	0
Water year 1988, 710												
09050590	202	2,720	5,960	4,900	4,420	1,130	0	0	2,910	17,510	13,390	0
Water year 1988, 53,150												
TO ARKANSAS RIVER BASIN												
09042000	1,050	0	0	0	0	0	210	2,360	2,080	721	1,440	979
Water year 1987, 8,830												
09042000	0	0	0	0	0	0	4.2	1,010	4,970	1,570	779	1,270
Water year 1988, 9,610												
09063700	0	0	0	0	0	0	0	7,730	4,380	3,010	1,730	95
Water year 1986, 16,945												
09063700	0	0	2,990	3,170	2,940	3,150	6,290	0	0	0	0	0
Water year 1987, 18,540												

TRANSMOUNTAIN DIVERSIONS FROM COLORADO RIVER BASIN IN COLORADO--Continued

TO ARKANSAS RIVER BASIN--Continued

DIVERSIONS, IN ACRE-FEET, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
(SOME PREVIOUSLY UNPUBLISHED DIVERSIONS TO THE PLATTE AND ARKANSAS RIVER BASINS ARE INCLUDED IN THIS TABLE)

Diversion	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
09063700	0	0	0	7,300	7,670	7,800	0	0	0	0	2,450	4,050
Water year 1988, 29,280												
09077160	0	0	0	0	0	0	0	1,130	1,710	384	117	0
Water year 1987, 3,340												
09077160	0	0	0	0	0	0	0	0	12,010	2,310	0	0
Water year 1988, 14,320												
09077500	240	0	0	0	0	0	0	673	1,830	716	122	16
Water year 1987, 3,597												
09077500	138	0	0	0	0	0	0	857	2,640	507	99	51
Water year 1988, 4,290												

TRANSMOUNTAIN DIVERSIONS NO LONGER PUBLISHED

Following is a list of Transmountain Diversions no longer being published in this report. Diversions, in acre-feet, for these sites are available from the State of Colorado, Division of Water Resources.

TO PLATTE RIVER BASIN

09012000	Eureka ditch
09022500	Moffat Water tunnel
09046000	Boreas Pass ditch
09047300	Vidler tunnel

TO ARKANSAS RIVER BASIN

09061500	Columbine ditch
09062000	Ewing ditch
09062500	Wurtz ditch
09073000	Twin Lakes tunnel
09115000	Larkspur ditch

TO RIO GRANDE BASIN

09118200	Tarbell ditch
09121000	Tabor ditch
09341300	Treasure Pass ditch
09347000	Don LaFont ditches 1&2
09348000	Williams Cr-Squaw Pass ditch
09351000	Pine River-Weminuche Pass ditch
09351500	Weminuche Pass ditch

As the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the Geological Survey collects limited streamflow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are usable in low-flow or floodflow analyses, depending on the type of data collected. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Records collected at partial-record stations are presented in three tables. The first is a table of discharge measurements at low-flow partial-record stations; the second is a table of annual maximum stage and discharge at crest-stage stations; and the third is a table containing discharge measurements made at miscellaneous sites for both low flow and high flow are given in a fourth table.

LOW-FLOW PARTIAL-RECORD STATIONS

Measurements of streamflow in the area covered by this report made at low-flow, partial-record stations are given in the following table. Most of these measurements were made during periods of base flow when streamflow is primarily from ground-water storage. These measurements, when correlated with the simultaneous discharge of a nearby stream where continuous records are available, will give a picture of the low-flow potentiality of the stream. The column headed "Period of record" shows the water years in which measurements were made at the same, or practically the same, site.

DISCHARGE MEASUREMENTS MADE AT LOW-FLOW PARTIAL-RECORD STATIONS DURING WATER YEAR 1988

Station no.	Station name	Location	Drainage area (mi^2)	Period of record	Date	Discharge (ft^3/s)
*09058900	Moniger Creek near Minturn, CO	Lat 39°43'37", long 106°28'50", in Eagle County, on left bank 1.5 mi upstream from mouth, 7.5 mi north of Minturn.	0.76	1965-88	10-13-87 6-16-88 6-30-88 8-01-88 8-30-88	.04 1.61 .54 .10 .02

*Also a crest-stage partial-record station.

CREST-STAGE PARTIAL-RECORD STATIONS

The following table contains annual maximum discharge for crest-stage stations. A crest-stage gage is a device which will register the peak stage occurring between inspections of the gage. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter.

ANNUAL MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS DURING WATER YEAR 1988

Station no.	Station name	Location	Drainage area (mi²)	Non-contributing	Period of record	Date	Gage height (feet)	Discharge (ft³/s)
		PINEY RIVER BASIN						
*[illegible]	Moniger Creek near Minturn, CO	Lat 39°43'37", long 106°28'53", in Eagle County, on left bank 1.5 mi upstream from mouth, 7.5 mi north of Minturn.	0.76	-	1965-88	5-18-88	1.89	19
		COLORADO RIVER BASIN						
[illegible]	Sweetwater Creek at mouth near Dotsero, CO	Lat 39°[illegible]'20", long 107°02'22", in NW¼NE¼ sec.9, T.4 S., R.86 W., Eagle County, 5.3 mi north of Dotsero.	105	-	1979-88	6-6-88	8.78	318
[illegible]	Mann Creek near Silt, CO	Lat 39°43'54", long 107°42'48", in NW¼NW¼ sec.18, T.6 S., R.92 W., Garfield County, 3.3 mi southeast of Silt.	53.3	-	1979-88 1982	unknown	10.52 11.79	unknown b225
		GUNNISON RIVER BASIN						
[illegible]	Dry Creek near Olathe, CO	Lat 38°33'13", long 108°02'42", SW¼NE¼ sec. 35, T.50 N., R.11 W., Montrose County, 4.9 mi southwest of Olathe.	100	-	1979-87 1979-88	unknown 5-19-88	2.74 1.43	a360 115
		SAN JUAN RIVER BASIN						
09361400	Junction Creek near Durango, CO	Lat 37°20'34", long 107°54'35", sec.14, T.35N., R.10 W., La Plata County, on left bank 4.9 mi upstream from mouth and 4.5 mi northwest of Durango.	26.3	-	1959-65, 1972, 1979-88	5-15-88	3.05	125

* Also a low-flow partial-record station.
a Correction.--The maximum discharge for water year 1987 is 360 ft³/s, the previous published figure was in error.
b Revised.--WDR CO-82-2 (M), published incorrectly.

401751107062000 UPPER FOIDEL CREEK PRECIPITATION GAGE, NEAR OAK CREEK, CO

LOCATION.--Lat 40°17'51", long 107°06'20", in SE¼SE¼ sec. 34, T.5 N., R.87 W., Routt County, Hydrologic Unit 14050001, and 8.7 mi northwest of Oak Creek.

METEOROLOGICAL DATA

SITE.--Altitude is 8,050 ft above National Geodetic Vertical Datum of 1929, from topographic map.

SNOW-COURSE DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

Date	Depth (inches)	Water Content (inches)	Density (percent)
Jan 28...	30.4	8.8	[illegible]
Feb 22...	41.[illegible]	[illegible]	29.[illegible]
Apr 05...	[illegible]	14.1	[illegible]

RAINFALL RECORDS

PERIOD OF RECORD.--January 1976 to current year.

INSTRUMENTATION.--Belfort weighing bucket rain-gage

REMARKS.--Unpublished rainfall data for water years 1976-86 are available in District office.

RAINFALL ACCUMULATED (INCHES), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	[illegible]	.00	---	.00	.00	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
2	.00	.00	.00	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.00	[illegible]	[illegible]
3	.00	.33	.00	---	.47	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
4	.00	.01	.00	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
5	.00	.00	.00	---	.14	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
6	.00	.00	.00	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7	.00	.03	.26	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
8	.00	.01	.26	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
9	.00	.00	.26	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
10	.00	.00	.26	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
11	.00	.01	.26	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	---	[illegible]	[illegible]
12	.00	.00	.26	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	---	[illegible]	[illegible]
13	.33	.01	.26	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	---	[illegible]	[illegible]
14	.22	.04	.26	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	---	[illegible]	[illegible]
15	.01	.00	.26	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	---	[illegible]	[illegible]
16	.00	.79	.26	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	---	[illegible]	.00
17	.00	.37	.26	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	---	[illegible]	[illegible]
18	.00	.02	.26	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	---	[illegible]	[illegible]
19	.00	.01	.26	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	---	[illegible]	[illegible]
20	.00	.00	.26	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	---	[illegible]	[illegible]
21	.00	.02	.26	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	---	[illegible]	.00
22	.00	.00	.26	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	---	[illegible]	[illegible]
23	.00	.33	.26	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	---	[illegible]	[illegible]
24	.49	.03	.26	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	---	[illegible]	[illegible]
25	.00	.02	.26	---	.00	.00	[illegible]	[illegible]	[illegible]	---	[illegible]	[illegible]
26	.00	.00	.26	---	.00	.00	.00	[illegible]	[illegible]	---	[illegible]	.00
27	.00	.02	.26	---	.00	.00	.00	[illegible]	[illegible]	---	[illegible]	.00
28	.00	.03	.26	.00	.00	.00	.00	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
29	.00	.00	.26	.00	.00	.00	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.00
30	.16	.00	.26	.04	---	.00	.00	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
31	.00	---	.26	.40	---	.00	---	[illegible]	[illegible]	[illegible]	[illegible]	---
TOTAL	1.21	2.16	6.50	---	2.30	3.21	1.2[illegible]	6.24	[illegible]	---	[illegible]	[illegible]
MAX	.49	.79	.26	---	.47	.15	[illegible]	.44	[illegible]	---	[illegible]	[illegible]
MIN	.00	.00	.00	---	.00	.00	.00	.00	[illegible]	---	[illegible]	[illegible]

MISCELLANEOUS STATION ANALYSES

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
401540106502801 L. MORRISON C AB DAM SITE NR OAK CREEK, CO (LAT 40 15 40N LONG 106 50 28W)									
NOV 1987 10...	1240	1.0	274	8.6	1.5	11.3	7	0.02	61
APR 1988 20...	1030	11	104	8.2	2.0	13.9	378	11	60
MAY 18...	1335	9.8	96	7.8	10.5	11.1	177	4.7	46
JUN 09...	1105	1.5	168	8.2	14.0	8.4	45	0.18	66
JUL 26...	1105	0.14	289	8.4	18.0	7.3	27	0.01	46
AUG 24...	1100	0.25	270	8.6	14.5	8.6	26	0.02	41
401608106513001 MIDDLE C AB DAM SITE NR OAK CREEK, CO (LAT 40 16 08N LONG 106 51 30W)									
NOV 1987 10...	1300	0.25	419	8.4	1.0	12.1	42	0.03	6
APR 1988 20...	1000	1.0	303	7.8	1.0	12.4	141	0.39	32
MAY 18...	1410	2.1	359	8.1	10.0	11.5	25	0.14	54
JUN 09...	1050	0.13	414	8.1	9.5	9.7	51	0.02	18
JUL 26...	1057	0.05	466	8.7	11.0	8.2	25	0.00	--
AUG 24...	1040	0.02	425	8.7	8.0	9.4	24	0.00	31
401609106525201 YAMPA R AB DAM SITE NR OAK CREEK, CO (LAT 40 16 09N LONG 106 52 52W)									
NOV 1987 10...	1315	32	381	8.1	3.0	11.6	17	1.5	49
MAY 1988 18...	1020	191	315	8.2	8.5	11.6	486	251	87
JUN 09...	1000	97	488	8.4	12.5	8.9	53	14	62
JUL 26...	1045	91	511	8.6	15.0	9.5	19	4.7	--
AUG 08...	1145	88	456	8.9	16.0	6.1	28	6.6	--
24...	1000	66	391	8.4	13.0	8.7	42	7.5	51
401729106514601 MARTIN C AB DAM SITE NR OAK CREEK, CO (LAT 40 17 29N LONG 106 51 46W)									
NOV 1987 10...	0940	0.15	434	7.9	1.5	9.5	62	0.02	17
APR 1988 20...	1115	0.63	173	7.5	6.0	11.6	19	0.03	68
MAY 18...	1310	1.5	219	8.2	12.0	9.9	9	0.03	26
JUL 26...	1120	0.01	433	7.9	16.5	5.7	45	0.00	47
AUG 08...	1200	0.02	416	8.0	15.0	5.7	41	0.00	--
24...	1300	0.01	385	7.9	18.0	5.0	46	0.00	54

09010500 COLORADO RIVER BELOW BAKER GULCH, NEAR GRAND LAKE, CO. (LAT 40 19 33N LONG 105 51 22W)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
OCT 1987 08...	1630	11	75	8.0	MAY 1988 17...	1355	273	49	7.0
NOV 06...	0950	15	75	2.5	JUN 22...	1645	315	40	10.5
DEC 17...	0845	5.4	88	0.0	JUL 21...	1540	36	56	17.0
JAN 1988 22...	1050	7.1	81	0.0	AUG 24...	1715	12	72	18.0
MAR 10...	0950	6.4	85	0.0	SEP 14...	0850	17	75	6.0
APR 20...	0930	42	70	0.0					

09022000 FRASER RIVER AT UPPER STATION, NEAR WINTER PARK, CO. (LAT 39 53 45N LONG [illegible])

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
OCT 1987 06...	1150	4.3	74	5.5	MAY 1988 19...	1240	37	[illegible]	[illegible]
NOV 04...	1355	3.7	74	2.5	JUN 21...	0935	77	[illegible]	[illegible]
DEC 15...	1045	3.1	78	0.0	JUL 20...	1535	18	[illegible]	[illegible]
JAN 1988 20...	1035	2.4	80	0.0	AUG 23...	1130	10	[illegible]	8.0
MAR 08...	0955	2.1	102	0.0	SEP 13...	1115	4.9	[illegible]	[illegible]
APR 18...	1000	5.5	130	0.0					

09024000 FRASER RIVER NEAR WINTER PARK, CO. (LAT 39 54 00N LONG 105 46 [illegible])

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
OCT 1987 06...	1600	12	80	7.0	MAY 1988 19...	1130	35	[illegible]	5.0
NOV 04...	1500	6.7	77	4.5	JUN 21...	1145	45	57	9.0
DEC 15...	1325	4.6	114	0.0	JUL 19...	1410	14	71	[illegible]
JAN 1988 20...	1245	5.1	132	0.0	AUG 23...	1300	10	80	13.5
MAR 08...	1230	4.8	133	0.0	SEP 13...	1115	[illegible]	77	7.5
APR 18...	1225	12	142	5.0					

09025000 VASQUEZ CREEK AT WINTER PARK, CO. (LAT 39 55 13N LONG [illegible] 30W)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
OCT 1987 06...	1800	3.7	56	6.0	MAY 1988 19...	0925	32	40	1.0
NOV 04...	1610	4.4	54	2.0	JUN 22...	0910	42	31	6.0
DEC 15...	1515	3.3	52	0.0	JUL 20...	0800	10	45	7.0
JAN 1988 21...	0940	3.1	56	0.0	AUG 25...	0900	10	62	7.5
APR 19...	0900	7.6	71	0.5	SEP 15...	0840	11	61	3.5

09025400 ELK CREEK NEAR FRASER, CO. (LAT 39 55 09N LONG 105 49 31W)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
OCT 1987 07...	1515	0.55	55	10.0	MAY 1988 18...	1550	18	39	6.0
NOV 05...	0910	0.36	51	0.0	JUN 21...	1350	2.8	41	15.0
DEC 17...	1420	0.46	56	0.0	JUL 20...	1755	2.2	42	12.5
JAN 1988 21...	1130	0.40	66	0.0	AUG 25...	1045	1.3	50	9.5
MAR 09...	0950	0.41	66	0.0	SEP 15...	1055	1.0	49	5.5
APR 19...	1030	1.9	56	0.5					

09026500 ST. LOUIS CREEK NEAR FRASER, CO. (LAT 39 54 36N LONG 105 52 40W)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
OCT 1987 07...	1800	5.8	85	7.0	MAY 1988 13...	1800	39	76	5.0
NOV 05...	1115	4.9	97	4.0	JUN 21...	1540	34	86	13.5
DEC 16...	1500	6.9	92	0.0	JUL 20...	1425	26	77	12.5
JAN 1988 20...	1440	5.2	94	0.0	AUG 23...	1715	13	84	14.0
MAR 05...	1505	5.4	97	0.0	SEP 15...	1225	11	82	4.5
APR 18...	1620	[illegible]	93	1.0					

[illegible] RANCH CREEK NEAR FRASER, CO. (LAT 39 57 00N LONG 105 45 54W)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
OCT 1987 07...	[illegible]	[illegible]	53	5.0	MAY 1988 18...	1425	E28	39	5.5
NOV [illegible]...	[illegible]	[illegible]	50	1.0	JUN 23...	1400	71	30	9.0
DEC 16...	[illegible]	[illegible]	54	0.0	JUL 22...	1335	6.7	35	11.0
JAN 1988 [illegible]...	[illegible]	[illegible]	55	0.0	AUG 25...	1300	4.2	48	10.0
MAR [illegible]...	[illegible]	[illegible]	56	0.0	SEP 13...	1415	3.7	45	6.0
APR [illegible]...	[illegible]	[illegible]	56	1.0					

[illegible] CABIN CREEK NEAR FRASER, CO. (LAT 39 59 09N LONG 105 44 40W)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
OCT 1987 07...	1010	[illegible]	43	2.0	MAY 1988 18...	1225	2.8	26	3.0
NOV 05...	[illegible]	[illegible]	40	2.0	JUN 23...	1240	34	28	9.5
DEC 16...	[illegible]	[illegible]	--	0.0	JUL 22...	1045	7.2	44	7.5
JAN 1988 21...	[illegible]	[illegible]	48	0.0	AUG 25...	1410	2.4	47	12.5
MAR [illegible]...	1020	1.1	54	0.0	SEP 13.	1555	2.2	48	8.0
APR [illegible]...	1650	1.7	39	0.0					

09034250 COLORADO RIVER AT WINDY GAP, NEAR GRANBY, CO. (LAT 40 06 30N LONG 106 00 13W)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
OCT 1987 03...	[illegible]	64	145	8.5	APR 1988 27...	1110	248	155	6.0
NOV [illegible]...	[illegible]	77	143	5.0	MAY 26...	0905	513	95	9.0
DEC 17...	[illegible]	[illegible]	120	0.0	JUN 29...	1140	628	90	12.0
JAN 1988 22...	[illegible]	70	131	0.0	AUG 04...	1020	143	138	17.0
FEB 24...	[illegible]	72	123	1.0	SEP 08...	1110	75	124	14.5
MAR 30...	[illegible]	[illegible]	153	0.5	19...	1535	75	133	12.5

09034900 BOBTAIL CREEK NEAR JONES PASS, CO. (LAT 39 45 37N LONG 105 54 21W)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
OCT 1987 02...	1455	1.7	64	9.0	MAY 1988 16...	1230	21	34	--
NOV 16...	1510	1.5	66	0.0	JUN 24...	1515	72	33	7.0
DEC 17...	1150	1.3	62	0.0	JUL 15...	1035	15	47	7.0
JAN 1988 27...	1200	0.84	68	0.0	AUG 12...	1255	5.5	53	10.0
MAR 16...	1150	0.73	68	0.0	SEP 16...	1520	2.9	60	9.0
APR 20...	1415	1.5	60	0.5					

09035500 WILLIAMS FORK BELOW STEELMAN CREEK, CO. (LAT 39 46 44N LONG 105 55 40W)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
OCT 1987				
02...	1255	1.1	76	4.5
NOV				
16...	1220	0.64	80	0.0
DEC				
17...	1245	1.0	73	0.0
JAN 1988				
27...	1200	0.63	73	0.0
MAR				
16...	1200	2.8	63	0.0
APR				
20...	1125	2.6	64	0.0
MAY 1988				
16...	1210	14	45	1.0
JUN				
24...	1245	157	33	8.0
JUL				
15...	1315	39	46	8.0
AUG				
12...	1040	15	53	8.0
SEP				
16...	1305	0.74	64	6.0

09035700 WILLIAMS FORK ABOVE DARLING CREEK, NR LEAL, CO. (LAT 39 47 22N LONG 106 01 18W)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
NOV 1987				
18...	1030	8.0	65	0.0
DEC				
17...	1430	5.8	71	0.0
JAN 1988				
14...	1445	5.9	74	0.0
MAR				
09...	1415	5.1	78	0.0
APR				
14...	1410	13	65	1.5
MAY 1988				
18...	1545	53	44	5.0
JUN				
08...	1610	208	34	5.0
JUL				
07...	1350	45	42	10.0
AUG				
09...	1055	31	49	8.5
SEP				
14...	1105	3.9	62	5.0

09035800 DARLING CREEK NEAR LEAL, CO. (LAT 39 48 17N LONG 106 01 11W)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
NOV 1987				
19...	1450	3.0	73	0.0
DEC				
18...	1300	2.0	62	0.0
JAN 1988				
14...	1600	2.3	71	0.0
MAR				
09...	1535	2.1	75	0.5
APR				
15...	1130	4.8	70	2.0
MAY 1988				
18...	1300	18	54	2.5
JUN				
09...	1410	62	39	5.0
JUL				
08...	1345	17	48	8.5
AUG				
10...	1545	5.6	63	9.0
SEP				
15...	1515	4.1	68	4.0

09035900 SOUTH FORK OF WILLIAMS FORK NEAR LEAL, CO. (LAT 39 47 44N LONG 106 01 49W)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
NOV 1987				
18...	1410	7.9	94	0.0
DEC				
18...	1150	9.4	91	0.0
JAN 1988				
15...	1140	7.3	92	0.0
MAR				
11...	1120	6.3	95	0.0
APR				
14...	1510	13	78	1.5
28...	1315	9.8	81	2.5
MAY 1988				
19...	1100	111	54	1.0
JUN				
08...	1420	173	41	7.0
15...	1030	162	42	3.0
JUL				
08...	1050	61	54	7.0
AUG				
09...	1215	20	73	7.0
SEP				
14...	1300	13	85	4.5

09036000 WILLIAMS FORK NEAR LEAL, CO. (LAT 39 49 53N LONG 106 03 15W)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
NOV 1987				
18...	1610	26	83	0.5
DEC				
18...	1510	26	52	0.5
JAN 1988				
15...	1350	19	65	0.5
MAR				
11...	1340	16	91	0.5
APR				
15...	1400	42	74	2.0
MAY 1988				
19...	1340	257	53	2.0
JUN				
09...	1120	667	39	5.5
JUL				
07...	1615	161	54	11.0
AUG				
09...	1430	64	63	10.5
SEP				
14...	1510	34	78	6.5

09039000 TROUBLESOME CREEK NEAR PEARMONT, CO. (LAT 40 13 03N LONG 106 18 45W)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
OCT 1987				
09...	1140	7.1	109	5.5
JAN 1988				
07...	1635	13	94	0.0
FEB				
25...	1440	16	--	0.0
MAR				
10...	1305	13	85	0.0
APR				
20...	1245	27	87	5.0
MAY 1988				
17...	1255	149	74	8.5
JUN				
22...	1245	58	72	15.0
JUL				
21...	1110	14	77	11.0
AUG				
24...	1140	15	102	12.5
SEP				
14...	1325	28	120	9.0

09046490 BLUE RIVER AT BLUE RIVER, CO. (LAT 39 27 21N LONG 106 01 52W)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (LEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
OCT 1987 14...	0915	16	139	6.5	MAY 1988 26...	1225	51	45	6.0
NOV 16...	0925	11	110	2.0	JUN 16...	0955	76	50	10.0
DEC 14...	1350	11	50	1.0	JUL 28...	1020	36	70	8.0
JAN 1988 11...	1115	10	50	1.0	AUG 25...	1040	40	80	9.0
MAR 08...	1105	5.7	130	4.0	SEP 19...	0955	22	90	10.0
APR 12...	1030	11	110	1.5					

09046600 BLUE RIVER NEAR DILLON, CO. (LAT 39 32 55N LONG 106 02 15W)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (LEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
OCT 1987 14...	1145	35	145	7.5	MAY 1988 26...	1445	169	120	5.0
NOV 18...	1125	34	150	1.0	JUN 16...	1425	327	50	9.0
DEC 14...	1030	26	120	0.0	JUL 28...	1335	82	110	9.0
23...	1105	27	60	1.5	AUG 26...	1030	74	110	9.0
JAN 1988 11...	1430	29	80	1.0	SEP 20...	1400	62	110	8.0
MAR 28...	1250	29	150	1.5					
APR [illegible]...	1340	37	140	2.5					

09047500 SNAKE RIVER NEAR MONTEZUMA, CO. (LAT 39 36 20N LONG 105 56 33W)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (LEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
OCT 1987 13...	1145	21	98	4.0	MAY 1988 27...	1050	145	60	4.0
NOV 18...	1240	17	75	0.0	JUN 16...	1655	287	70	6.0
DEC 14...	[illegible]	13	160	0.0	JUL 29...	1230	67	80	9.0
JAN 1988 12...	1015	11	60	0.0	AUG 25...	1410	45	95	9.0
MAR 07...	1435	12	150	0.0	SEP 20...	1320	27	70	7.0
APR 15...	1115	23	85	1.5					
27...	1635	23	90	1.5					

09047700 KEYSTONE GULCH NEAR DILLON, CO. (LAT 39 35 40N LONG 105 58 19W)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (LEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
OCT 1987 13...	1330	2.6	77	5.0	MAY 1988 27...	0855	14	60	4.0
NOV 18...	1610	4.5	60	0.0	JUN 17...	0945	26	60	6.0
DEC 15...	1550	1.7	45	0.0	JUL 29..	0925	9.0	70	9.0
JAN 1988 12...	1350	4.6	45	0.0	AUG 31...	1055	4.0	60	10.0
MAR 07...	1155	2.2	50	0.0	SEP 20...	1010	3.2	50	8.0
APR 15...	0940	4.3	90	0.0					
27...	1420	3.6	80	1.0					

09050100 TENMILE CREEK BELOW NORTH TENMILE CREEK, AT FRISCO, CO. (LAT 39 34 37N LONG 106 06 33W)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (LEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
OCT 1987 06...	1135	27	905	3.5	MAY 1988 24...	1145	200	493	12.0
JAN 1988 28...	1320	25	1190	0.0	JUN 21...	1625	409	241	12.0
FEB 23...	1300	29	1310	0.0	AUG 02...	1440	60	439	13.5
MAR 29...	1720	22	485	0.0	SEP 07...	1115	24	463	8.0
APR 26...	1600	49	186	5.0					

SUPPLEMENTAL WATER-QUALITY DATA FOR GAGING STATIONS

09050700 BLUE RIVER BELOW DILLON, CO. (LAT 39 37 32N LONG 106 03 57W)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
OCT 1987 06...	1400	124	242	5.0	MAY 1988 23...	1410	320	302	4.0
JAN 1988 26...	1430	63	323	3.5	AUG 02...	1230	101	271	5.5
FEB 23...	1435	100	323	4.0	SEP 06...	1315	102	277	5.5
MAR 29...	1810	98	358	4.0	29...	1200	103	266	5.5
APR 26...	1330	109	341	4.0					

09051050 STRAIGHT CREEK BELOW LASKEY GULCH NEAR DILLON, CO (LAT 39 38 23N LONG 106 02 23W)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
OCT 1987 06...	1000	5.6	106	1.5	APR 1988 26...	1200	5.3	242	1.5
DEC 02...	1330	3.8	126	0.5	MAY 23...	1200	18	149	4.5
JAN 1988 26...	1230	3.5	115	0.0	JUN 21...	1130	77	59	7.0
FEB 23...	1100	2.8	140	0.0	AUG 02...	1100	14	89	9.0
MAR 23...	1517	5.7	225	0.0	SEP 06...	1130	7.0	108	7.0

09052000 ROCK CREEK NEAR DILLON, CO. (LAT 39 43 23N LONG 106 07 41W)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
OCT 1987 13...	1500	4.8	60	0.0	APR 1988 11...	1505	4.6	45	1.5
NOV 17...	1620	8.8	35	0.0	26...	1445	17	80	1.0
DEC 16...	1530	4.8	30	0.0	MAY 23...	1655	29	50	1.0
JAN 1988 12...	1510	2.5	45	0.0	JUN 15...	1520	85	45	5.0
MAR 11...	1010	4.5	20	0.0	JUL 27...	1600	20	60	8.0
					SEP 01...	1510	9.3	50	4.0
					15...	1400	10	40	4.0

09052400 BOULDER CREEK AT UPPER STATION, NEAR DILLON, CO. (LAT 39 43 41N LONG 106 10 22W)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
OCT 1987 14...	1530	3.5	53	3.0	MAY 1988 25...	1345	34	50	5.0
NOV 17...	0905	2.6	55	1.0	JUN 15...	1100	52	30	6.0
DEC 16...	1350	2.5	40	0.0	JUL 27...	1310	13	45	9.0
JAN 1988 11...	1600	2.4	40	0.0	AUG 24...	1430	6.9	50	9.0
MAR 11...	1240	5.0	45	0.0	SEP 14...	1235	7.1	40	8.0
APR 11...	1325	5.1	85	1.5					

09052800 SLATE CREEK AT UPPER STATION, NEAR DILLON, CO. (LAT 39 45 47N LONG 106 11 31W)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
OCT 1987 16...	1120	5.5	54	4.0	MAY 1988 25...	1125	57	40	4.0
NOV 17...	1405	2.5	50	0.0	JUN 14...	1105	77	40	9.0
DEC 16...	1125	4.1	40	0.0	JUL 27...	1015	27	50	8.0
JAN 1988 13...	1210	3.8	60	0.0	AUG 24...	1130	13	60	8.0
MAR 10...	1450	3.8	40	0.0	SEP 15...	1100	14	45	4.0
APR 26...	1140	13	80	1.0					

09054000 BLACK CREEK BELOW BLACK LAKE, NEAR DILLON, CO. (LAT 39 47 59N LONG 106 16 04W)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
OCT 1987				
15...	1645	3.4	27	8.0
NOV				
17...	1150	5.0	40	2.0
DEC				
15...	1440	5.8	110	0.0
JAN 1988				
13...	1535	4.7	45	0.0
MAR				
10...	1205	4.1	50	0.0
APR 1988				
13...	1410	6.2	85	1.5
29...	1140	8.5	90	2.0
MAY				
24...	1540	33	30	4.0
JUN				
13...	1410	125	50	6.0
JUL				
25...	1600	39	30	11.0
SEP				
02...	1230	15	35	11.0

09055300 CATARACT CREEK NEAR KREMMLING, CO. (LAT 39 50 07N LONG 106 18 57W)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
OCT 1987				
15...	1015	0.92	47	5.0
15...	1035	0.92	47	5.0
NOV				
16...	1020	2.3	150	1.0
DEC				
15...	1015	2.3	85	0.0
JAN 1988				
15...	1410	1.6	50	0.0
MAR				
10...	1045	1.2	80	0.0
APR 1988				
13...	1110	6.3	90	1.0
MAY				
24...	1245	31	45	3.0
JUN				
14...	1350	82	45	9.0
JUL				
25...	1345	11	40	10.0
SEP				
01...	1205	3.4	30	9.0
13...	1415	1.2	35	9.0

09058000 COLORADO RIVER NEAR KREMMLING, CO. (LAT 40 02 12N LONG 106 26 22W)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
OCT 1987				
08...	1130	835	213	10.0
MAR 1988				
30...	1000	695	285	2.0
APR				
28...	1430	1110	293	7.5
AUG 1988				
03...	1810	868	236	18.0
SEP				
07...	1545	813	203	13.5
27...	1300	669	207	13.5

09058500 PINEY RIVER BELOW PINEY LAKE, NEAR MINTURN, CO. (LAT 39 42 29N LONG 106 25 38W)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
OCT 1987				
14...	--	2.6	135	5.5
NOV				
23...	1420	2.2	85	0.0
MAR 1988				
10...	0900	2.2	67	0.0
APR				
13...	1640	13	64	0.0
MAY 1988				
17...	1605	108	200	4.5
JUN				
15...	1315	82	26	10.0
29...	1255	191	23	7.5
AUG				
03...	1240	8.0	--	18.0
31...	0945	2.1	52	9.0

09058610 DICKSON CREEK NEAR VAIL, CO. (LAT 39 42 14N LONG 106 27 25W)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
OCT 1987				
13...	1410	1.0	183	4.0
NOV				
23...	1630	0.96	86	0.5
MAY 1988				
17...	1255	3.9	200	7.5
JUN 1988				
16...	1135	2.6	309	9.5
30...	1135	1.6	337	11.0
AUG				
01...	1625	0.94	--	15.5
30...	0910	0.74	360	9.5

09058700 FREEMAN CREEK NEAR MINTURN, CO. (LAT 39 41 55N LONG 106 26 41W)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
OCT 1987				
13...	1605	0.11	113	5.5
NOV				
23...	1515	0.14	89	0.0
APR 1988				
12...	1420	0.19	233	0.0
MAY				
17...	1100	7.3	84	2.5
JUN 1988				
16...	1325	1.5	173	17.0
30...	1305	1.0	189	18.5
AUG				
03...	1500	0.10	--	19.0
30...	1045	0.08	243	8.0

09058800 EAST MEADOW CREEK NEAR MINTURN CO. (LAT 39 43 54N LONG 106 25 36W)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
OCT 1987				
14...	1245	0.89	--	5.0
NOV				
23...	--	1.3	80	--
APR				
13...	1218	1.6	77	--
JUN 1988				
29...	1437	8.4	40	--
AUG				
31...	1137	0.99	62	--

09059500 PINEY RIVER NEAR STATE BRIDGE, CO. (LAT 39 48 00N LONG 106 35 00W)

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE WATER (DEG C)
OCT 1987				
14...	1155	16	359	7.0
NOV				
04...	1020	2.2	314	2.5
JUN 1988				
14...	1345	209	133	10.5
JUL				
12...	1620	49	194	17.0
AUG				
10...	1500	16	323	19.5
SEP				
13...	1720	16	383	10.0

09063000 EAGLE RIVER AT RED CLIFF, CO. (LAT 39 30 34N LONG 106 22 00W)

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE WATER (DEG C)
OCT 1987				
08...	1710	11	190	5.0
18...	1710	11	90	5.0
NOV				
20...	1300	13	99	0.5
DEC				
09...	1445	19	185	0.0
09...	1500	19	185	--
MAR 1988				
09...	1725	12	193	0.0
MAY 1988				
18...	1550	100	157	10.0
JUN				
14...	0935	118	131	4.0
28...	1115	64	175	10.5
AUG				
04...	1345	17	--	15.5
SEP				
01...	0940	11	240	8.0

09063200 WEARYMAN CREEK NEAR RED CLIFF, CO. (LAT 39 31 14N LONG 106 19 36W)

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE WATER (DEG C)
OCT 1987				
13...	1205	2.2	115	4.0
NOV				
18...	1445	1.7	180	0.0
DEC				
09...	1330	1.7	248	--
09...	1335	1.7	248	0.0
13...	1205	2.2	115	4.0
MAR 1988				
09...	1650	1.6	41	0.0
MAY 1988				
18...	1045	10	253	3.0
JUN				
13...	1515	43	205	3.5
28...	1445	21	222	7.0
AUG				
04...	1125	5.4	--	7.5
SEP				
01...	1435	2.8	283	7.5

09063400 TURKEY CREEK NEAR RED CLIFF, CO. (LAT 39 31 32N LONG 106 20 08W)

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE WATER (DEG C)
OCT 1987				
13...	1230	4.7	156	4.5
13...	1232	4.7	156	4.5
NOV				
18...	1535	2.7	189	0.0
DEC				
09...	1340	3.5	263	0.0
MAR 1988				
09...	1630	3.1	340	0.0
MAY 1988				
18...	1325	51	213	5.5
JUN				
13...	1730	112	177	4.5
28...	1255	43	211	6.5
AUG				
04...	0915	14	--	7.0
SEP				
01...	1135	5.9	275	7.5

09063900 MISSOURI CREEK NEAR GOLD PARK, CO. (LAT 39 23 25N LONG 106 28 10W)

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE WATER (DEG C)
OCT 1987				
08...	1330	0.84	36	4.0
NOV				
20...	1040	1.2	56	0.0
MAR 1988				
09...	1335	0.72	51	1.5
APR				
14...	1100	3.9	40	0.0
MAY 1988				
19...	1025	19	27	1.0
JUN				
14...	1340	14	25	6.0
27...	1435	12	22	8.0
AUG				
02...	1410	8.9	--	12.0
29...	1640	1.9	34	12.0

09064000 HOMESTAKE CREEK AT GOLD PARK, CO. (LAT 39 24 20N LONG 106 25 58W)

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE WATER (DEG C)
OCT 1987				
08...	1415	7.8	48	5.5
NOV				
20...	1151	11	60	0.0
MAR 1988				
09...	1345	9.3	41	0.0
APR				
14...	1215	18	38	0.5
MAY 1988				
19...	1240	67	30	3.0
JUN				
14...	1540	35	28	9.5
AUG				
02...	1200	26	--	12.5
29...	1445	9.0	35	14.5

09064500 HOMESTAKE CREEK NEAR RED CLIFF, CO. (LAT 39 28 24N LONG 106 22 02W)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
OCT 1987				
08...	1555	11	50	5.5
18...	1555	11	50	5.5
NOV				
18...	1316	9.7	59	0.0
DEC				
09...	--	9.2	70	0.5
09...	1210	9.2	70	0.5
MAR 1988				
09...	1510	5.2	41	2.5
APR				
14...	1415	52	--	2.0
MAY 1988				
19...	1615	130	32	4.0
JUN				
14...	1145	71	31	7.5
28...	1630	51	30	16.0
AUG				
02...	0950	36	--	11.5
SEP				
01...	1655	8.1	41	13.5

09065100 CROSS CREEK NEAR MINTURN, CO. (LAT 39 34 05N LONG 106 24 45W)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
OCT 1987				
07...	1235	9.1	40	8.5
07...	1430	9.1	40	8.5
NOV				
03...	--	8.5	30	4.5
03...	1130	8.6	30	4.5
MAR 1988				
10...	1155	2.2	85	0.5
MAY				
16...	1405	166	29	6.0
JUN 1988				
17...	0950	207	24	6.0
28...	0915	151	23	9.0
AUG				
04...	1545	28	--	15.5
SEP				
02...	0915	9.2	44	9.5

09065500 GORE CREEK AT UPPER STATION, NEAR MINTURN, CO. (LAT 39 37 40N LONG 106 16 24W)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
OCT 1987				
07...	1405	6.0	60	3.0
NOV				
17...	1315	4.0	35	0.0
DEC				
15...	1215	3.1	27	0.0
JAN 1988				
11...	1330	2.7	30	0.0
MAR				
07...	1215	2.9	41	0.0
APR				
12...	1500	13	55	[illegible]
MAY 1988				
17...	1600	116	35	4.5
JUN				
07...	1620	175	30	5.0
JUL				
06...	1530	52	37	9.5
AUG				
11...	1345	8.7	55	10.0
SEP				
13...	1305	7.7	60	6.0

09066000 BLACK GORE CREEK NEAR MINTURN, CO. (LAT 39 35 47N LONG 106 15 57W)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
OCT 1987				
07...	1215	3.1	130	[illegible]
NOV				
17...	1130	2.1	196	0.0
DEC				
15...	1555	2.0	190	0.0
JAN 1988				
11...	1530	2.4	194	0.0
MAR				
07...	1500	2.3	190	0.0
APR				
27...	1145	6.7	103	1.5
MAY 1988				
17...	1325	62	103	4.5
JUN				
07...	1415	111	74	7.5
JUL				
06...	1225	15	110	9.0
AUG				
11...	1200	4.8	148	9.0
SEP				
16...	1130	2.5	170	3.5

09066100 BIGHORN CREEK NEAR MINTURN, CO. (LAT 39 38 24N LONG 106 17 34W)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
OCT 1987				
08...	1020	1.6	50	2.0
NOV				
17...	1500	1.4	69	0.0
DEC				
15...	1020	0.87	72	0.0
JAN 1988				
11...	1120	0.77	70	0.0
MAR				
07...	1025	0.82	78	0.0
APR				
12...	1205	4.3	63	1.5
MAY 1988				
17...	1030	38	32	3.0
JUN				
07...	1140	59	29	4.0
JUL				
06...	1000	20	34	5.5
AUG				
11...	1025	3.8	51	7.0
SEP				
13...	1500	2.8	61	5.5

09066150 PITKIN CREEK NEAR MINTURN, CO. (LAT 39 38 37N LONG 106 18 37W)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
OCT 1987				
07...	1545	2.6	50	2.0
NOV				
16...	1630	2.2	31	0.0
DEC				
14...	1525	1.5	85	0.0
JAN 1988				
12...	1350	1.0	90	0.0
MAR				
08...	1425	1.1	93	0.0
APR				
11...	1425	2.8	102	2.0
MAY 1988				
16...	1600	34	41	4.0
JUN				
06...	1520	56	34	5.5
JUL				
05...	1600	20	40	8.5
AUG				
08...	1440	5.6	62	[illegible]
SEP				
13...	1145	3.7	74	[illegible]

09066200 BOOTH CREEK NEAR MINTURN, CO. (LAT 39 39 02N LONG 106 19 16W)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
OCT 1987				
08...	1515	1.0	50	2.0
NOV				
16...	1440	2.1	116	1.0
DEC				
14...	1340	1.3	63	0.0
JAN 1988				
12...	1130	1.0	65	0.0
MAR				
08...	1215	1.0	137	0.0
APR				
11...	1630	4.2	125	4.5
27...	1405	5.4	110	5.0
MAY 1988				
16...	1420	40	52	5.5
JUN				
06...	1315	63	42	[illegible]
JUL				
05...	1415	15	50	[illegible]
AUG				
08...	1310	3.1	92	[illegible]
SEP				
13...	1025	1.6	124	6.0

09066300 MIDDLE CREEK NEAR MINTURN, CO. (LAT 39 38 50N LONG 106 22 48W)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
OCT 1987				
08...	1250	0.44	50	2.0
NOV				
16...	1315	0.34	230	1.0
DEC				
14...	1200	0.28	232	0.0
JAN 1988				
12...	1005	0.21	240	0.0
MAR				
08...	1035	0.26	248	0.0
APR				
11...	1110	0.65	219	3.0
MAY 1988				
16...	1225	10	[illegible]	4.0
JUN				
[illegible]	1110	35	[illegible]	[illegible]
JUL				
[illegible]	1200	6.6	[illegible]	[illegible]
AUG				
05...	1120	2.0	[illegible]	[illegible]
SEP				
12...	[illegible]	1.2	155	[illegible]

09066400 RED SANDSTONE CREEK NEAR MINTURN, CO. (LAT 39 40 58N LONG 106 24 01W)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
OCT 1987				
13...	--	0.68	83	5.5
13...	1655	0.64	83	5.5
MAR 1988				
10...	1010	0.81	63	0.0
APR				
13...	1805	4.5	79	0.0
MAY				
20...	0940	44	58	1.0
JUN 1988				
15...	1510	28	[illegible]	6.0
16...	1555	[illegible]	[illegible]	7.0
29...	0930	20	59	[illegible]
AUG				
05...	0915	3.1	--	7.0
30...	1450	1.0	109	[illegible]

09070000 EAGLE RIVER BELOW GYPSUM, CO. (LAT 39 38 58N LONG 106 57 11W)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
OCT 1987				
13...	1530	186	1190	11.0
NOV				
02...	1535	250	1000	9.5
DEC				
07...	1520	206	1030	3.0
JAN 1988				
13...	1145	132	1150	0.0
FEB				
22...	1555	171	1110	1.0
MAR				
28...	1550	228	1000	5.5
MAY 1988				
03...	1540	490	833	7.0
JUN				
06...	1550	2430	157	11.0
JUL				
11...	1335	507	510	19.0
AUG				
11...	0900	182	998	16.0
SEP				
12...	1545	200	1260	13.0

09070500 COLORADO RIVER NEAR DOTSERO, CO. (LAT 39 38 40N LONG 107 04 40W)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
OCT 1987					MAY 1988				
[illegible]...	1325	1230	592	10.5	03...	1350	2670	337	7.0
NOV					JUN				
12...	1335	1110	620	9.0	06...	1325	5950	196	11.0
DEC					JUL				
31...	[illegible]	1080	573	1.0	11...	1345	2150	418	16.0
FEB 1988					AUG				
[illegible]...	1415	1300	610	1.0	11...	1235	1440	473	18.0
MAR					SEP				
[illegible]...	1415	1311	535	5.0	12...	1420	1520	552	12.5

09071300 GRIZZLY CREEK NEAR GLENWOOD SPRINGS, CO. (LAT 39 43 04N LONG 107 18 51W)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
OCT 1987					JUL 1988				
[illegible]...	[illegible]	[illegible]	[illegible]	[illegible]	13...	1400	4.6	249	17.0
NOV					AUG				
[illegible]...	1440	[illegible]	[illegible]	[illegible]	10...	1020	1.5	263	11.0
APR 1988					SEP				
[illegible]...	[illegible]	[illegible]	460	[illegible]	14...	1420	1.7	231	9.0
JUN									
[illegible]...	[illegible]	[illegible]	72	[illegible]					

[illegible] ROARING FORK RIVER ABOVE DIFFICULT CREEK NEAR ASPEN, CO. (LAT 39 08 28N LONG 106 46 25W)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
OCT 1987					MAY 1988				
[illegible]...	[illegible]	[illegible]	57	10.0	04...	0903	37	65	2.0
NOV					25...	0920	95	50	4.5
[illegible]...	[illegible]	[illegible]	103	4.0	JUN				
DEC					17...	0845	127	43	6.5
[illegible]...	[illegible]	[illegible]	87	[illegible]	JUL				
FEB 1988					13...	0820	44	55	10.0
[illegible]...	[illegible]	[illegible]	[illegible]	[illegible]	AUG				
[illegible]...	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]...	0900	41	73	9.5
APR					SEP				
[illegible]...	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]...	0755	45	78	5.5

[illegible] ROARING FORK RIVER NEAR ASPEN, CO. [illegible]

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
OCT 1987					MAY 1988				
[illegible]...	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]...	[illegible]	47	85	4.0
NOV					[illegible]...	[illegible]	156	60	6.0
[illegible]...	1400	[illegible]	111	[illegible]	JUN				
DEC					17...	1130	[illegible]	63	8.0
[illegible]...	[illegible]	[illegible]	[illegible]	[illegible]	JUL				
JAN 1988					[illegible]...	1015	72	73	11.0
[illegible]...	[illegible]	[illegible]	[illegible]	[illegible]	AUG				
FEB					10...	0950	53	85	10.0
[illegible]...	1015	[illegible]	127	[illegible]	SEP				
APR					14...	0935	62	63	6.5
[illegible]...	[illegible]		117	[illegible]					

[illegible] HUNTER CREEK NEAR ASPEN, CO. (LAT 39 12 [illegible]N LONG 106 47 49W)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
OCT 1987					MAY 1988				
[illegible]...	[illegible]	5.1	62	11.0	03...	1535	46	52	6.0
NOV					24...	1440	111	40	7.5
[illegible]...	[illegible]	[illegible]	[illegible]	2.0	JUN				
DEC					16...	1535	60	38	10.5
[illegible]...	[illegible]	[illegible]	93	0.0	JUL				
JAN 1988					12...	1550	41	45	16.5
[illegible]...	[illegible]	[illegible]	109	0.0	AUG				
FEB					09...	1450	19	60	16.5
23...	1510	6.0	117	0.0	SEP				
APR					13...	1545	30	50	9.0
[illegible]...	1625	7.8	87	5.5					

09074800 CASTLE CREEK ABOVE ASPEN, CO. (LAT 39 05 15N LONG 106 48 42W)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
OCT 1987					MAY 1988				
06...	1400	21	330	9.0	03...	0810	17	430	0.0
NOV					24...	0800	45	315	2.5
03...	0920	19	465	3.0	JUN				
DEC					16...	0910	125	220	4.5
08...	0725	12	485	0.0	JUL				
JAN 1988					12...	0805	53	250	6.0
12...	0805	9.9	190	0.0	AUG				
FEB					09...	0755	32	290	6.0
23...	0805	7.4	875	0.0	SEP				
APR					13...	0810	26	365	5.5
05...	0815	10	515	0.0					

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
09075700 MAROON CREEK ABOVE ASPEN, CO. (LAT 39 07 25N LONG 106 54 17W)									
OCT 1987 07...	1611	35	422	9.0	MAY 1988 03...	1010	19	790	3.0
					24...	1035	80	455	6.5
NOV 03...	0700	32	800	4.0	JUN 16...	1135	191	260	8.0
DEC 08...	1025	23	800	1.0	JUL 12...	1055	99	330	9.0
FEB 1988 23...	1040	27	1290	0.0	AUG 09...	1055	59	455	9.[illegible]
APR 05...	1120	21	920	3.5	SEP 13...	1020	47	240	7.5
14...	1300	16	870	8.0					
09076520 OWL CREEK NEAR ASPEN, CO. (LAT 39 13 25N LONG 106 52 45W)									
OCT 1987 07...	1741	0.14	362	14.0	MAY 1988 03...	1255	8.9	255	6.[illegible]
					24...	1215	7.4	30	11.[illegible]
NOV 03...	1125	0.21	580	4.0	JUN 16...	1345	2.[illegible]	420	15.[illegible]
DEC 08...	1255	0.29	540	0.0	JUL 12...	1405	1.0	485	17.[illegible]
JAN 1988 12...	1010	0.42	715	0.0	AUG 09...	1305	0.71	340	15.[illegible]
FEB 23...	1300	0.18	440	0.0	SEP 13...	1335	0.29	[illegible]	[illegible]
APR 05...	1425	2.1	620	0.0					
09080400 FRYINGPAN RIVER NEAR RUEDI, CO. (LAT 39 21 56N LONG 106 49 30W)									
OCT 1987 07...	1135	138	142	7.0	MAY 1988 02...	1440	20[illegible]	260	[illegible]
					23...	1045	223	243	8.[illegible]
NOV 02...	1435	142	205	8.1	JUN 15...	1405	315	245	6.[illegible]
DEC 07...	1350	141	210	6.5	JUL 11...	1105	164	[illegible]	7.[illegible]
JAN 1988 11...	1405	141	205	3.5	AUG 08...	1325	140	170	8.[illegible]
FEB 22...	1355	187	340	4.0	SEP 12...	1430	178	190	7.5
APR 04...	1400	137	350	4.0					
09081600 CRYSTAL RIVER ABOVE AVALANCHE CREEK, NEAR REDSTONE, CO. (LAT 39 13 56N LONG 107 12 36W)									
OCT 1987 07...	0930	64	380	10.0	MAY 1988 04...	1355	206	415	8.0
					25...	1420	671	230	9.0
NOV 03...	1345	81	690	9.0	JUN 17...	1515	907	205	11.5
DEC 09...	1335	55	700	3.5	JUL 13...	1335	262	310	15.5
JAN 1988 13...	1150	33	1060	3.5	AUG 10...	1345	115	510	16.0
FEB 02...	0845	46	840	2.5	SEP 14...	1340	147	495	[illegible]
24...	1300	75	840	4.0					
APR 06...	1255	76	750	7.5					
09085000 ROARING FORK RIVER AT GLENWOOD SPRINGS, CO. (LAT 39 32 37N LONG 107 19 44W)									
NOV 1987 05...	0800	620	658	5.5	MAY 1988 04...	1135	826	440	8.[illegible]
DEC 09...	1050	530	630	2.0	JUN 08...	1235	4100	220	8.[illegible]
JAN 1988 11...	1145	498	624	2.0	JUL 14...	1135	1010	520	16.0
FEB 24...	1040	474	615	1.5	AUG 12...	0855	520	713	15.5
MAR 30...	1115	590	582	3.5	SEP 15...	1055	695	650	11.0

09085100 COLORADO RIVER BELOW GLENWOOD SPRINGS, CO. (LAT 39 33 18N LONG 107 20 13W)

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE WATER (DEG C)
OCT 1987				
08...	0800	1800	650	13.0
NOV				
05...	1015	1840	1000	8.0
DEC				
09...	1520	1510	1010	2.5
JAN 1988				
11...	1520	1670	970	2.0
FEB				
24...	1355	730	1140	4.0
MAR				
25...	1455	1920	960	4.0
MAY 1988				
04...	1445	3470	560	9.5
JUN				
08...	1530	10100	261	10.5
JUL				
14...	1450	2890	530	13.0
AUG				
11...	1545	2110	910	19.0
SEP				
15...	1445	2260	1100	12.0

09089500 WEST DIVIDE CREEK NEAR RAVEN, CO. (LAT 39 19 52N LONG 107 34 46W)

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE WATER (DEG C)
OCT 1987				
05...	1125	1.6	564	6.5
06...	1135	1.8	564	5.5
NOV				
06...	1140	4.7	520	6.0
DEC				
10...	1115	3.1	538	0.0
JAN 1988				
14...	1115	3.3	--	0.0
FEB				
25...	1055	2.5	340	0.0
MAR				
31...	1105	7.8	315	0.5
APR				
05...	1010	69	253	5.0
20...	1115	153	192	3.5
MAY				
05...	1115	69	253	5.0
20...	1250	153	192	3.0
JUN 1988				
09...	0955	117	150	7.0
09...	1010	117	150	7.0
15...	1240	65	158	13.0
JUL				
15...	1020	6.4	299	16.5
15...	1120	5.7	299	16.5
AUG				
08...	1400	1.4	340	22.0
08...	1410	1.4	340	22.0
08...	1420	1.4	340	22.0
SEP				
16...	1015	2.4	324	7.0
16...	1020	2.4	324	7.0
16...	1035	2.2	324	7.0
16...	1130	2.4	324	7.0

09093700 COLORADO RIVER NEAR DE BEQUE, CO. (LAT 39 21 45N LONG 108 09 07W)

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE WATER (DEG C)
OCT 1987				
01...	1100	1820	1080	13.0
22...	1200	1670	1160	8.0
NOV				
19...	1100	1870	1120	1.5
DEC				
10...	1100	1660	1200	2.5
FEB 1988				
09...	1400	1450	1190	0.5
24...	1400	1690	1130	4.0
MAR				
17...	1100	1540	1150	3.5
APR 1988				
21...	1300	3900	667	10.0
MAY				
23...	1000	6310	471	10.5
JUN				
16...	1100	6740	502	15.0
JUL				
21...	1100	2040	927	21.0
SEP				
01...	0900	1940	1010	18.0

09095500 COLORADO RIVER NEAR CAMEO, CO. (LAT 39 14 20N LONG 108 16 00W)

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE WATER (DEG C)
OCT 1987				
08...	1200	2050	1140	12.0
14...	1000	2170	1110	11.0
21...	1000	1970	1170	8.0
21...	1400	1970	1170	8.0
28...	1000	1970	1370	9.0
NOV				
05...	1300	2150	1140	9.5
12...	1000	2290	1160	6.0
13...	1300	1930	1140	1.5
25...	1100	1950	1140	2.0
DEC				
02...	1200	1820	1140	0.0
09...	1000	1320	1090	2.0
09...	1200	1820	1090	2.0
JAN 1988				
28...	1300	1720	1240	0.0
FEB				
26...	1300	2000	1140	3.5
MAR				
02...	0900	1970	--	5.5
02...	1200	1970	1120	5.5
09...	1300	1730	1060	6.0
16...	1400	1800	1370	4.0
23...	1200	1980	1160	7.5
30...	0935	2030	1100	4.5
APR				
06...	1300	2550	1020	10.0
13...	1300	2790	888	11.0
20...	1000	3800	667	12.0
20...	1300	3800	667	12.0
27...	1010	3190	850	9.0
MAY 1988				
04...	1300	3850	644	11.0
11...	1300	8440	719	13.5
18...	1000	9980	380	11.5
18...	1200	9980	380	11.5
25...	1100	5960	514	13.5
JUN				
01...	1100	7740	452	10.0
08...	1300	11400	350	13.0
15...	1000	6660	471	13.5
15...	1300	6660	491	13.5
22...	1300	6770	445	17.0
29...	0940	5230	600	17.5
JUL				
06...	1000	4520	590	18.5
13...	1200	3000	741	20.5
20...	1100	2070	935	20.0
20...	1300	2070	935	20.0
27...	1300	2130	1010	21.0
AUG				
03...	1100	2400	893	20.5
17...	0930	2210	945	20.0
24...	0900	2210	964	19.5
31...	1000	2130	1020	18.5
31...	1100	1980	1020	18.5
SEP				
09...	1110	1750	1120	17.0
16...	1200	2290	910	14.0
22...	1000	2080	1020	14.5
22...	1200	2010	1020	14.5
30...	1000	1920	1060	12.0

09105000 PLATEAU CREEK NEAR CAMEO, CO. (LAT 39 11 33N LONG 108 16 10W)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
OCT 1987					MAY 1988				
01...	0800	102	570	8.[illegible]	17...	1230	183	272	11.5
NOV					25...	1130	202	452	10.0
05...	1000	124	763	8.5	JUN				
DEC					16...	2030	101	568	16.[illegible]
10...	0800	119	752	1.5	JUL				
FEB 1988					13...	[illegible]	57	647	19.5
09...	1000	60	747	3.0	27...	1235	64	464	22.0
23...	1300	63	765	3.0	AUG				
MAR					31...	1900	76	503	17.0
16...	1000	107	652	4.0					
APR									
21...	1000	182	564	12.[illegible]					

09109000 TAYLOR RIVER BELOW TAYLOR PARK RESERVOIR, CO. (LAT [illegible] LONG [illegible])

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
OCT 1987					MAR 1988				
14...	1306	[illegible]	[illegible]	6.0	31...	[illegible]	[illegible]	[illegible]	--
NOV					APR				
17...	[illegible]	124	[illegible]	4.0	26...	[illegible]	[illegible]	[illegible]	[illegible]
DEC					MAY				
07...	1548	72	[illegible]	[illegible]	19...	[illegible]	[illegible]	[illegible]	[illegible]
JAN 1988					AUG				
25...	1555	76	[illegible]	4.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

09110000 TAYLOR RIVER AT ALMONT, CO. (LAT [illegible] LONG [illegible])

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
OCT 1987					APR 1988				
14...	1440	133	[illegible]	[illegible]	25...	[illegible]	[illegible]	[illegible]	--
NOV					MAY				
17...	1416	181	[illegible]	4.0	19...	[illegible]	[illegible]	[illegible]	[illegible]
DEC					AUG				
08...	0845	[illegible]	247	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
JAN 1988									
26...	0815	124	[illegible]	[illegible]					

09112500 EAST RIVER AT ALMONT, CO. (LAT [illegible] LONG [illegible])

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
OCT 1987					APR 1988				
14...	[illegible]	74	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
NOV					MAY				
17...	[illegible]	73	447	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DEC					JUN				
08...	1033	68	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
JAN 1988					[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
26...	1010	[illegible]	[illegible]	[illegible]	AUG				
MAR					[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
01...	1245	63	[illegible]	--					

09114500 GUNNISON RIVER NEAR GUNNISON, CO. (LAT [illegible] LONG [illegible])

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
OCT 1987					MAY 1988				
15...	0800	304	267	4.0	09...	[illegible]	[illegible]	[illegible]	[illegible]
NOV					JUN				
18...	0830	309	257	1.0	08...	[illegible]	[illegible]	[illegible]	[illegible]
DEC					27...	0735	1650	[illegible]	[illegible]
09...	0800	264	[illegible]	1.0	AUG				
MAR 1988					24...	[illegible]	[illegible]	[illegible]	[illegible]
14...	[illegible]	329	[illegible]	[illegible]					
APR									
06...	0855	304	262	6.0					

09118450 COCHETOPA CREEK BELOW ROCK CREEK NEAR PARLIN, CO. (LAT [illegible] LONG [illegible])

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
OCT 1987					MAR 1988				
13...	1209	33	217	9.0	02...	0925	27	[illegible]	[illegible]
NOV					APR				
16...	1235	24	240	1.0	06...	0915	34	267	2.[illegible]
DEC					MAY				
08...	1200	18	143	1.0	10...	0910	27	374	[illegible]
JAN 1988					AUG				
26...	1200	23	261	--	24...	1005	52	169	15.0

09119000 TOMICHI CREEK AT GUNNISON, CO. (LAT 38 31 18N LONG 106 56 25W)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
OCT 1987					JAN 1988				
13...	1343	81	390	11.0	26...	1445	86	382	0.0
NOV					MAR				
16...	1615	128	417	--	14...	0100	69	279	--
DEC					14...	1300	94	247	1.5
28...	1353	114	442	2.0	AUG				
					24...	1350	128	236	26.0

09124500 LAKE FORK AT GATEVIEW, CO. (LAT 38 17 56N LONG 107 13 46W)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
OCT 1987					MAR 1988				
15...	1002	70	277	9.0	02...	1158	59	162	4.0
NOV					APR				
18...	1142	44	310	3.0	06...	1215	65	212	7.0
DEC					MAY				
09...	1150	57	227	2.0	11...	1030	183	72	4.0
JAN 1988					AUG				
27...	--	46	219	--	22...	1600	159	137	20.5

09126000 CIMARRON RIVER NEAR CIMARRON, CO. (LAT 38 15 40N LONG 107 32 39W)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
OCT 1987					MAY 1988				
[illegible]	1311	[illegible]	160	8.0	[illegible]	--	25	91	5.0
[illegible]	1345	26	175	11.0	JUL				
NOV					14...	1110	105	--	13.0
1[illegible]...	1435	[illegible]	205	2.0	AUG				
DEC					[illegible]	[illegible]	155	96	15.5
[illegible]	1055	[illegible]	227	3.0					
JAN 1988									
[illegible]	1410	[illegible]	[illegible]	[illegible]					

09128000 GUNNISON RIVER BELOW GUNNISON TUNNEL, CO. (LAT 38 31 45N LONG 107 38 54W)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
OCT 1987					APR 1988				
06...	1255	360	159	11.0	07...	1445	855	--	5.0
NOV					MAY				
18...	1310	1470	130	3.5	[illegible]	--	367	198	9.0
[illegible]	1857	1600	160	[illegible]	[illegible]	1150	367	201	9.0
JAN 1988					JUL				
13...	1010	1667	156	[illegible]	12...	0845	356	211	13.0
MAR					SEP				
29...	0855	1514	242	3.5	[illegible]	1630	542	195	13.5

09128500 SMITH FORK NEAR CRAWFORD, CO. (LAT 38 43 40N LONG 107 30 22W)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
OCT 1987					MAY 1988				
06...	[illegible]	5.7	[illegible]	[illegible]	05...	1435	91	125	10.0
NOV					26...	1410	93	95	11.5
05...	1410	13	130	7.0	JUN				
DEC					22...	1520	44	110	18.0
10...	1315	5.1	135	2.5	JUL				
JAN 1988					14...	1340	11	145	21.0
14...	0820	6.5	220	0.0	AUG				
FEB					11...	1405	4.3	165	22.0
05...	1255	14	200	1.0	SEP				
APR					15...	1345	14	150	13.5
07...	1340	42	180	8.5					

09132500 NORTH FORK GUNNISON RIVER NEAR SOMERSET, CO. (LAT 38 55 45N LONG 107 26 53W)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
OCT 1987					MAY 1988				
08...	0935	70	205	5.0	05...	0935	815	155	6.0
NOV					26...	0935	1070	85	6.0
05...	0950	90	205	2.0	JUN				
DEC					22...	0950	729	85	12.5
10...	0935	75	190	0.0	JUL				
FEB 1988					14...	0825	226	140	12.5
02...	1120	80	230	0.0	AUG				
25...	0855	75	235	0.0	11...	0825	238	155	11.5
APR					SEP				
07...	0900	334	195	2.0	15...	0825	113	160	7.5

09134000 MINNESOTA CREEK NEAR PAONIA, CO. (LAT 38 52 13N LONG 107 30 06W)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
OCT 1987 06...	1205	3.5	645	9.0	MAY 1988 05...	1125	21	390	[illegible]
NOV 05...	1150	5.7	750	5.0	26...	1140	37	255	5.5
DEC 10...	1035	4.7	680	0.0	JUN 22...	1210	36	270	15.0
JAN 1988 14...	1035	3.7	890	0.0	JUL 14...	1045	24	[illegible]	15.5
FEB 25...	1035	3.6	1120	0.0	AUG 11...	1105	14	[illegible]	[illegible]
APR 27...	1100	10	770	5.0	SEP 15...	1130	5.2	[illegible]	9.5

09135900 LEROUX CREEK AT HOTCHKISS, CO. (LAT 38 47 [illegible] LONG 107 [illegible])

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
OCT 1987 09...	1030	[illegible]	1090	11.0	MAY 1988 05...	[illegible]	[illegible]	[illegible]	[illegible]
NOV [illegible]	[illegible]	11	[illegible]	5.0	JUN 23...	1400	4.8	[illegible]	[illegible]
DEC [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	JUL 14...	[illegible]	[illegible]	[illegible]	[illegible]
JAN 1988 [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	AUG 11...	[illegible]	[illegible]	[illegible]	[illegible]
FEB [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	SEP [illegible]	[illegible]	[illegible]	[illegible]	[illegible]
25...	[illegible]	[illegible]	1490	[illegible]					
APR [illegible]	[illegible]	[illegible]	[illegible]	[illegible]					

[illegible] SURFACE CREEK NEAR CEDAREDGE, CO. (LAT [illegible] LONG [illegible])

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
OCT 1987 [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	MAY 1988 [illegible]	[illegible]	[illegible]	[illegible]	[illegible]
NOV [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DEC 11...	[illegible]	[illegible]	[illegible]	[illegible]	JUN [illegible]	[illegible]	[illegible]	[illegible]	[illegible]
JAN 1988 [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	JUL [illegible]	[illegible]	[illegible]	[illegible]	[illegible]
FEB [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
APR [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	AUG [illegible]	[illegible]	[illegible]	[illegible]	[illegible]
					SEP [illegible]	[illegible]	[illegible]	[illegible]	[illegible]

[illegible] SURFACE CREEK AT CEDAREDGE, CO. (LAT [illegible] LONG [illegible])

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
OCT 1987 [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	MAY 1988 [illegible]	[illegible]	[illegible]	[illegible]	[illegible]
NOV 06...	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DEC 11...	[illegible]	[illegible]	[illegible]	[illegible]	JUN [illegible]	[illegible]	27	[illegible]	[illegible]
JAN 1988 15...	1155	[illegible]	--	[illegible]	JUL 15...	1050	[illegible]	[illegible]	[illegible]
FEB 26...	1135	[illegible]	[illegible]	[illegible]	AUG [illegible]	1110	[illegible]	[illegible]	15.0
APR 08...	1045	38	117	3.0	SEP 16...	[illegible]	[illegible]	[illegible]	[illegible]

[illegible] GUNNISON RIVER AT DELTA, CO. (LAT 38 [illegible] LONG [illegible])

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
OCT 1987 09...	1200	1340	1000	12.0	APR 1988 18...	[illegible]	[illegible]	[illegible]	[illegible]
NOV 16...	1600	1730	657	6.5	MAY 09...	1230	[illegible]	[illegible]	[illegible]
19...	0830	1700	570	4.5	16...	1200	1950	[illegible]	[illegible]
DEC 14...	1200	1830	530	3.0	JUN 20...	1300	[illegible]	[illegible]	[illegible]
JAN 1988 11...	1300	1940	520	3.0	JUL 07...	1200	590	[illegible]	[illegible]
25...	1100	1810	425	0.0	12...	1100	520	[illegible]	[illegible]
FEB 22...	1300	1870	477	4.0	13...	1130	420	[illegible]	[illegible]
MAR 21...	1300	1740	534	7.5	18...	1245	402	[illegible]	[illegible]
31...	1230	2150	480	5.0	AUG 29...	1000	637	[illegible]	[illegible]

09146200 UNCOMPAHGRE RIVER NEAR RIDGWAY, CO. (LAT 38 11 02N LONG 107 44 43W)

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE WATER (DEG C)
OCT 1987				
06...	0835	75	664	6.0
NOV				
18...	1235	51	810	0.5
JAN 1988				
14...	--	41	638	0.0
MAR				
02...	--	65	865	5.0
APR				
06...	--	68	630	5.0
MAY 1988				
12...	1130	176	288	9.0
25...	1110	251	323	10.0
JUN				
08...	1415	586	223	13.0
29...	1335	495	433	12.0
AUG				
03...	1035	132	721	22.0
SEP				
21...	1025	165	541	12.0

09147000 DALLAS CREEK NEAR RIDGWAY, CO. (LAT 38 10 40N LONG 107 45 28W)

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE WATER (DEG C)
OCT 1987				
06...	0935	13	795	5.5
NOV				
18...	1105	20	934	0.0
JAN 1988				
14...	1110	18	622	0.0
MAR				
02...	1135	30	682	5.0
APR				
06...	1230	36	560	7.0
MAY 1988				
12...	1240	1.3	782	16.0
JUN				
08...	1530	11	597	19.0
29...	1255	262	475	12.0
AUG				
04...	0900	55	582	12.0
SEP				
21...	1140	34	704	14.0

09147500 UNCOMPAHGRE RIVER AT COLONA, CO. (LAT 38 19 53N LONG 107 46 44W)

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE WATER (DEG C)
OCT 1987				
06...	1640	[illegible]	[illegible]	15.0
NOV				
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
19...	1230	128	[illegible]	[illegible]
DEC				
10...	1145	90	--	3.0
JAN 1988				
13...	0930	93	830	[illegible]
28...	0955	[illegible]	--	[illegible]
MAR				
03...	1034	[illegible]	[illegible]	--
[illegible]	[illegible]	84	770	3.0
APR 1988				
08...	1100	145	443	7.0
MAY				
12...	0830	137	612	6.0
13...	1200	137	833	6.0
JUN				
10...	1200	269	172	8.0
30...	--	300	247	10.0
JUL				
12...	1100	237	500	13.0
SEP				
02...	0925	146	486	13.0

09149500 UNCOMPAHGRE RIVER AT DELTA, CO. (LAT 38 44 31N LONG 108 04 49W)

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE WATER (DEG C)
OCT 1987				
05...	1700	416	1200	16.0
NOV				
16...	[illegible]	175	2120	3.5
18...	1230	172	2140	4.5
DEC				
15...	0800	83	2300	0.0
JAN 1988				
11...	1200	1 9	2260	0.5
25...	1500	1 8	--	0.5
FEB				
23...	0800	151	2100	0.5
MAR 1988				
22...	0800	100	2310	7.5
31...	1040	206	1120	4.0
APR				
19...	0800	259	1110	8.0
MAY				
09...	1130	116	1590	12.0
17...	0900	145	1610	13.0
JUN				
21...	0800	262	1650	15.5
JUL				
12...	1200	192	1630	19.5
14...	0900	178	1690	16.5

09151500 ESCALANTE CREEK NEAR DELTA, CO. (LAT 38 45 24N LONG 108 15 34W)

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE WATER (DEG C)
OCT 1987				
22...	1000	6.2	570	12.0
NOV				
17...	1200	13	496	3.0
DEC				
14...	1000	13	562	0.0
JAN 1988				
26...	0900	13	523	0.0
FEB				
23...	0900	15	544	0.5
MAR				
21...	1000	20	492	7.0
APR				
18...	1000	192	198	5.5
MAY 1988				
11...	0900	176	250	8.5
16...	1000	181	213	11.5
31...	1000	66	333	11.0
JUN				
07...	1200	27	456	19.0
20...	1000	13	536	20.0
JUL				
18...	1000	6.0	600	20.0
AUG				
26...	1100	6.5	460	23.0

09153290 REED WASH NEAR MACK, CO. (LAT 39 12 41N LONG 108 48 11W)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
OCT 1987					APR 1988				
23...	0800	75	1790	8.5	19...	1100	55	1300	13.0
NOV					MAY				
12...	1200	11	4630	9.0	31...	1400	51	1390	16.0
DEC					JUN				
11...	0800	50	1360	3.0	21...	1300	47	1700	20.5
JAN 1988					JUL				
13...	1300	4.7	4070	2.5	15...	1400	49	[illegible]	22.0
FEB					AUG				
16...	0930	4.2	4620	1.5	26...	1600	65	2020	23.0
MAR									
[illegible]	[illegible]	4.7	[illegible]	11.5					

[illegible] CREEK ABOVE [illegible] RESERVOIR #2, NEAR GLADE PARK, CO. (LAT 38 5[illegible] [illegible])

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
[illegible] 1987					FEB 1988				
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	5...	1400	0.75	[illegible]	0.5
[illegible]					MAR				
[illegible]	[illegible]	0.24	[illegible]	[illegible]	24...	[illegible]	0.94	[illegible]	[illegible]
JAN 1988									
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]					

[illegible] DOLORES RIVER BELOW RICO, CO. (LAT 37 [illegible])

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
[illegible] 1987					MAY 1988				
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	--	[illegible]
[illegible]									
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	107	[illegible]	[illegible]
[illegible] 1988					JUN				
[illegible]	[illegible]	[illegible]	--	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]					JUL				
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]					AUG				
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
					SEP				
					[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

[illegible] DOLORES RIVER AT DOLORES, CO. (LAT 37 [illegible])

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
[illegible] 1987					MAY 1988				
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	30...	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]					JUN				
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1150	760	[illegible]	[illegible]
[illegible] 1988					JUL				
[illegible]	[illegible]	75	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]					AUG				
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	04...	[illegible]	[illegible]	[illegible]	[illegible]
APR									
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]					

[illegible] LOST CANYON CREEK NEAR DOLORES, CO. (LAT [illegible])

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
[illegible] 1987					MAY 1988				
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible] 1988									
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]					JUN				
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
					JUL				
[illegible]	[illegible]	[illegible]	[illegible]	5.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
					AUG				
					[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

[illegible] SAN MIGUEL RIVER NEAR PLACERVILLE, CO. (LAT 38 [illegible])

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
[illegible] 1987					MAY 1988				
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible] 1988					JUN				
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]									
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
					AUG				
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
					SEP				
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)

[illegible] SAN MIGUEL RIVER AT URAVAN, CO. (LAT 38 21 26N LONG 108 42 44W)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
MAY 1983				
[illegible]	1940	405	404	18.0
[illegible]	[illegible]	[illegible]	455	19.5
[illegible]				
[illegible]	[illegible]	564	267	[illegible]
[illegible]	[illegible]	515	495	[illegible]
AUG				
[illegible]	[illegible]	174	917	22.0
SEP				
[illegible]	[illegible]	[illegible]	851	18.5

[illegible] CREEK NEAR BUFFALO PASS, CO. (LAT 40 28 [illegible] LONG 106 40 46W)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
[illegible]				
[illegible]	[illegible]	0.07	37	16.5

[illegible]

09247600 YAMPA RIVER BELOW CRAIG, CO. (LAT 40 28 51N LONG 107 36 49W)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
OCT 1987					JUN 1988				
28...	1035	126	--	10.0	13...	0950	4840	69	13.5
[illegible]7...	0930	172	460	7.0	JUL				
NOV					21...	1540	294	320	23.5
19...	1000	194	490	[illegible]	AUG				
JAN 1988					18...	0950	150	441	20.0
11...	1035	153	--	0.5	24...	1248	146	472	24.[illegible]
MAR					31...	1040	5.6	595	26.[illegible]
[illegible]...	1240	342	580	[illegible]	SEP				
APR					29...	[illegible]	15	[illegible]	[illegible]
[illegible]...	[illegible]	1340	217	[illegible]					
MAY									
[illegible]...	[illegible]	[illegible]	[illegible]	[illegible]					

[illegible] WILLOW CREEK ABOVE TAYLOR DRAW NEAR AXIAL, CO. (LAT [illegible] LONG [illegible])

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
OCT 1987					MAY 1988				
[illegible]...	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]...	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]					JUN				
[illegible]...	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]...	[illegible]	[illegible]	[illegible]	[illegible]
DEC					AUG				
[illegible]...	[illegible]	[illegible]	--	[illegible]	[illegible]...	[illegible]	[illegible]	[illegible]	[illegible]
FEB 1988					SEP				
[illegible]...	[illegible]	[illegible]	--	[illegible]	[illegible]...	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]									
[illegible]...	[illegible]	[illegible]		--					
[illegible]...	[illegible]	[illegible]	[illegible]	[illegible]					

[illegible] NEAR AXIAL, CO. (LAT [illegible] LONG [illegible])

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
[illegible]					[illegible]				
[illegible]...	[illegible]	[illegible]	--	[illegible]	[illegible]...	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]					[illegible]				
[illegible]...	[illegible]	[illegible]		[illegible]	[illegible]...	[illegible]	[illegible]	--	[illegible]
[illegible]...	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]				
MAY					[illegible]...	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]...	[illegible]	[illegible]	[illegible]	[illegible]					

[illegible] LITTLE SNAKE RIVER NEAR SLATER, CO. (LAT [illegible] LONG [illegible])

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
OCT 1987					MAY 1988				
[illegible]...	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]...	[illegible]	[illegible]	[illegible]	[illegible]
NOV					JUN				
[illegible]...	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]...	[illegible]	[illegible]		--
DEC					JUL				
[illegible]...	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]...	[illegible]	[illegible]	[illegible]	[illegible]
FEB 1988					AUG				
15...	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]...	[illegible]	[illegible]	[illegible]	--
APR					SEP				
[illegible]...	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]...	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]...	[illegible]	[illegible]	[illegible]	[illegible]					

[illegible] SLATER FORK NEAR SLATER, CO. (LAT [illegible] LONG [illegible])

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
OCT 1987					MAY 1988				
[illegible]...	[illegible]	[illegible]	295	[illegible]	25...	1340	372	[illegible]	11.5
NOV					JUN				
09...	[illegible]	16	295	[illegible]	30...	1410	56	157	[illegible]
DEC					JUL				
1...	[illegible]	15	331	0.0	19...	1250	9.3	[illegible]	[illegible]
FEB 1988					AUG				
10...	1345	23	251	0.5	29...	1250	[illegible]	[illegible]	--
APR					SEP				
06...	1250	32	345	9.0	15...	1010	19	193	9.5
28...	[illegible]	38	197	7.5					

[illegible] WILLOW CREEK NEAR DIXON, WY. (LAT 40 54 56N LONG 107 33 16W)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
NOV 1987					JUN 1988				
[illegible]...	1000	4.65	275	0.5	15...	1140	[illegible]	[illegible]	[illegible]
DEC					JUL				
14...	0940	1.5	281	0.0	13...	1132	[illegible]	[illegible]	[illegible]
FEB 1988					AUG				
[illegible]...	[illegible]	1.3	[illegible]	0.5	29...	[illegible]	[illegible]	[illegible]	--
APR					SEP				
[illegible]...	[illegible]	[illegible]	[illegible]	[illegible]	15...	1340	[illegible]	[illegible]	[illegible]
[illegible]...	[illegible]	5.0	[illegible]	15.5					
MAY									
[illegible]...	[illegible]	[illegible]	98	11.0					

YAMPA RIVER AT DEERLODGE PARK, CO. (LAT 40 27 06N LONG 108 31 20W)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	298	10.5
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	321	15.5
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	365	21.4
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	621	23.5
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	722	23.0

09346400 SAN JUAN RIVER NEAR CARRACAS, CO. (LAT 37 00 49N LONG 107 18 42W)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
OCT 1987					MAY 1988				
03...	1430	113	422	15.5	04...	1045	739	216	10.5
NOV					24...	1315	960	173	10.0
18...	1040	207	385	6.0	JUN				
MAR 1988					08...	1545	1490	124	16.0
18...	1235	349	666	5.5	JUL				
APR					08...	1000	313	224	21.5
27...	1320	1230	273	10.5	AUG				
					24...	1330	219	--	20.5

09349800 PIEDRA RIVER NEAR ARBOLES, CO. (LAT 37 05 18N LONG 107 23 50W)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
OCT 1987					MAY 1988				
07...	1150	77	487	12.0	04...	1245	566	252	12.0
NOV					24...	1325	1510	114	9.5
17...	1515	144	377	5.0	JUN				
JAN 1988					2?...	1020	1150	118	12.0
11...	1455	135	800	[illegible]	JUL				
FEB					28...	[illegible]	247	208	21.5
[illegible]	1150	115	572	[illegible]	AUG				
APR					[illegible]	1105	235	--	18.5
14...	1415	477	[illegible]	11.5					

09361500 ANIMAS RIVER AT DURANGO, CO. (LAT 37 16 [illegible] LONG 107 [illegible])

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
OCT 1987					MAY 1988				
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	16...	[illegible]	[illegible]	[illegible]	11.0
NOV					26...	[illegible]	[illegible]	[illegible]	9.0
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	JUN				
DEC					[illegible]	[illegible]	[illegible]	[illegible]	10.5
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	15.5
JAN 1988					JUL				
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	17.0
FEB					AUG				
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	17.5
MAR									
[illegible]	[illegible]	[illegible]	430	13.0	[illegible]	[illegible]	[illegible]	[illegible]	5.0
APR									
[illegible]	[illegible]	[illegible]	421	[illegible]					

09371000 NAVAJO WASH NEAR TOWAOC, CO. (LAT 37 [illegible] LONG 108 [illegible])

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)
OCT 1987					APR 1988				
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2090	15.5
NOV					MAY				
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1930	22.5
JAN 1988					JUL				
[illegible]	[illegible]	[illegible]	640	[illegible]	[illegible]	[illegible]	[illegible]	1740	20.5
FEB					AUG				
[illegible]	1020	[illegible]	2010	[illegible]	17...	[illegible]	[illegible]	1830	19.5

MOFFAT COUNTY

401506108595401 SB 3-103-7ABB1. Dinosaur, CO. Drilled public-supply well in the Entrada Formation. Diameter, 9 in. Depth, 745 ft. MP, 5.0 ft below lsd. Elevation of land surface, 6,045 ft. Records available: 1974-82, 1988.

Highest water level, 146.96 ft below lsd, Nov. 8, 1974; lowest water level, 189.73 ft below lsd, Sept. 29, 1988.

Sept. 29, 1988 189.73 ft

[illegible] SB 7-92-34DBD1. Rocky Mtn. Real Estate. Drilled domestic supply well in the Browns Park Formation. Diameter, 5 in. Depth, 190 ft. MP, 4.0 ft below lsd. Elevation of land surface, 6,[illegible] ft. Records available: 1974-78, 1984, 1988.

Highest water level, 68.49 ft below lsd, Oct. 29, 1984; lowest water level, 87.95 below lsd, Sept. 29, 1988.

Sept. 29, 1988 87.95 ft (Pumping)

[illegible] SB [illegible]. U.S. Govt. Drilled stock well in the Wasatch/Valley Fill Formation. Diameter, [illegible] in. Depth, 86 ft. MP, 1.7 ft above lsd. Elevation of land surface, [illegible] ft. Records available: [illegible], 1988.

Highest water level, [illegible] ft below lsd, Aug. [illegible], 198[illegible]; lowest water level, 77.81 ft below lsd, Dec. [illegible], 197[illegible].

Sept. [illegible], 1988 [illegible] ft

[illegible] BLANCO COUNTY

[illegible] [illegible]. Drilled [illegible] in the Green River Formation. Diameter, [illegible] in. Depth, [illegible] ft. MP, [illegible] ft above lsd. Elevation of land surface, [illegible] ft. Records available: [illegible].

[illegible] water level, [illegible] ft below lsd, Apr. [illegible], [illegible]; lowest water level, [illegible] below lsd, Sept. [illegible].

[illegible]

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  water-quality record.......... [illegible]
[illegible], definition of.......... [illegible]
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October 1, 1978

FACTORS FOR CONVERTING INCH-POUND UNITS TO INTERNATIONAL SYSTEM UNITS (SI)

The following factors may be used to convert the inch-pound units published herein to the International System of Units (SI).

Multiply inch-pound units	By	To obtain SI units
	Length	
inches (in)	$2.54\text{x}10^{1}$	millimeters (mm)
	$2.54\text{x}10^{-2}$	meters (m)
feet (ft)	$3.048\text{x}10^{-1}$	meters (m)
miles (mi)	$1.609\text{x}10^{0}$	kilometers (km)
	Area	
acres	$4.047\text{x}10^{3}$	square meters (m^2)
	$4.047\text{x}10^{-1}$	square hectometers (hm^2)
	$4.047\text{x}10^{-3}$	square kilometers (km^2)
square miles (mi^2)	$2.590\text{x}10^{0}$	square kilometers (km^2)
	Volume	
gallons (gal)	$3.785\text{x}10^{0}$	liters (L)
	$3.785\text{x}10^{0}$	cubic decimeters (dm^3)
	$3.785\text{x}10^{-3}$	cubic meters (m^3)
million gallons	$3.785\text{x}10^{3}$	cubic meters (m^3)
	$3.785\text{x}10^{-3}$	cubic hectometers (hm^3)
cubic feet (ft^3)	$2.832\text{x}10^{1}$	cubic decimeters (dm^3)
	$2.832\text{x}10^{-2}$	cubic meters (m^3)
cfs-days	$2.447\text{x}10^{3}$	cubic meters (m^3)
	$2.447\text{x}10^{-3}$	cubic hectometers (hm^3)
acre-feet (acre-ft)	$1.233\text{x}10^{3}$	cubic meters (m^3)
	$1.233\text{x}10^{-3}$	cubic hectometers (hm^3)
	$1.233\text{x}10^{-6}$	cubic kilometers (km^3)
	Flow	
cubic feet per second (ft^3/s)	$2.832\text{x}10^{1}$	liters per second (L/s)
	$2.832\text{x}10^{1}$	cubic decimeters per second (dm^3/s)
	$2.832\text{x}10^{-2}$	cubic meters per second (m^3/s)
gallons per minute (gal/min)	$6.309\text{x}10^{-2}$	liters per second (L/s)
	$6.309\text{x}10^{-2}$	cubic decimeters per second (dm^3/s)
	$6.309\text{x}10^{-5}$	cubic meters per second (m^3/s)
million gallons per day	$4.381\text{x}10^{1}$	cubic decimeters per second (dm^3/s)
	$4.381\text{x}10^{-2}$	cubic meters per second (m^3/s)
	Mass	
tons (short)	$9.072\text{x}10^{-1}$	megagrams (Mg) or metric tons